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UNIVERSITY OF ALBERTA

EFFECTS OF SUPERVISEE-PREPARED AGENDA ON
CONFERENCE INTERACTION

BY

LU-ANNE MCFARLANE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

IN

SPEECH-LANGUAGE PATHOLOGY
DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

EDMONTON, ALBERTA

SPRING, 1992



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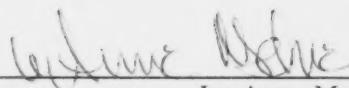
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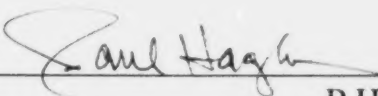


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ABSTRACT

This project investigated the effects of a supervisee-prepared agenda on: 1) active involvement of supervisor and supervisee in the conference, 2) level of differential supervision provided, 3) amount of supervisee self-analysis and 4) supervisee and supervisor perceptions of the indirect nature of the conference. Participants were eighteen student clinician/supervisor pairs. A single factor between-groups experimental design was used to investigate the effects of the independent variable (Agenda Use) on involvement in the conference and conference perceptions for both the supervisor and supervisee. Relationships between conference variables and supervisee experience variables were also investigated. Experimental group participants prepared and used a conference outline on two occasions, audio-taping the occasion of second use. Control group subjects provided an audio-tape of a supervisory conference. Both groups completed a conference rating scale. Results indicated that level of supervisee involvement was significantly higher in the experimental group. Supervisor involvement did not differ significantly. Data on experimental group subjects revealed positive relationships between supervisee experience within the placement and two other variables, conference complexity and amount of supervisee evaluation. No significant differences were found between supervisors' or supervisees' perceptions of indirect supervisory behaviors. It was concluded that use of a supervisee-prepared agenda caused increased supervisee involvement in the conference. Increasing conference complexity with increasing hours in the placement was interpreted as evidence of differential supervision.

self-analysis did not correlate well with supervisor or supervisee initiations. A post-hoc test of differences revealed a significantly higher level of complexity in the experimental group that may be evidence of positive change in self-analysis. The agenda appears to be an easily implemented, theoretically sound device for increasing supervisee involvement in the conference.

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CHAPTER 1

INTRODUCTION

Supervision is part of all clinical training programs in speech-language pathology. Although it is seen as essential, the ASHA Committee on Supervision stated, "We have no data to indicate that supervision makes a difference in the effectiveness of clinicians at any level of training. We also have no knowledge of critical factors in supervision methodology" (ASHA, 1978, p. 480). Anderson (1988) believed that, despite developments in supervision research, this statement continued to be a reflection of the knowledge base. Supervision for the purpose of clinical teaching has been an area of increasing interest in recent years as evidenced by a proliferation of text books on the subject (Anderson, 1988; Crago & Pickering, 1987; Farmer & Farmer, 1989; Oratio, 1977; Rassi, 1985) as well as a rapidly expanding body of research. Among these theoretical and empirical developments are models of supervision (Anderson, 1988; Caracciolo, Rigrodsky & Morrison, 1978; Farmer & Farmer, 1989; Oratio, 1977) and descriptive research on the supervisory conference (Brasseur & Anderson, 1983; Caracciolo, Rigrodsky & Morrison, 1978; Cu'atta & Seltzer, 1976; Dowling & Witkopp, 1982; Hatten, 1966; McCrea, 1980; Pickering, 1984; Roberts & Smith, 1982; Smith & Anderson, 1982; Tufts, 1984; Underwood, 1973).

Models of any process provide a framework within which to organize methods of practice and of study. Although the models proposed in speech pathology such as

the Molar Model (Oratio, 1977), a Rogerian orientation (Caracciolo, Rigrodsky & Morrison, 1978), the Trigonal Model (Farmer & Farmer, 1989), and the Clinical Supervision Continuum (Anderson, 1988) differ in components and constructs, they have important similarities. These models all recognize the importance of (1) differential supervision based on supervisee ability, (2) active supervisee participation in the supervisory conference and in problem solving, (3) supervisee self-analysis and (4) clinical autonomy as the ultimate goal of the supervisory process.

Studies of the supervisory process have indicated that these important elements are not found in most supervisory conferences. The conference has been studied extensively identifying a typical pattern of interaction characterized by Anderson (1988) as Direct-Evaluative. In this style of interaction supervisors assume a dominant role, providing feedback consisting of their opinions and suggestions. Supervisees tend to be passive participants and contribute to the conference mainly by describing treatment session events (Blumberg, 1974; Culatta & Seltzer, 1976; Dowling & Shank, 1981; Irwin, 1981; McCrea, 1980; Pickering, 1984; Roberts & Smith, 1982; Shapiro, 1985; Tufts, 1984). Such interaction appears to occur regardless of experience level or ability of supervisee (Culatta & Seltzer, 1976; Culatta & Seltzer, 1977; McCrea, 1980; Roberts & Smith, 1982; Tufts, 1984).

In summary, theorists (Anderson, 1988; Caracciolo, Rigrodsky & Morrison, 1978; Farmer & Farmer, 1989; Oratio, 1977) have provided appealing models of the supervisory process. However, researchers (Brasseur & Anderson, 1983; Caracciolo, Rigrodsky & Morrison, 1978; Culatta & Seltzer, 1976; Dowling & Witkopp, 1982;

Hatten, 1966; McCrea, 1980; Pickering, 1984; Roberts & Smith, 1982; Smith & Anderson, 1982; Tufts, 1984; Underwood, 1973) have provided data to suggest that these models are not being implemented in current supervisory practices. Dowling (1989) and Farmer and Farmer (1989) have suggested that a logical step for supervisory process research in speech-language pathology would be to investigate variables that may positively affect interaction between supervisor and supervisee, bringing it more in line with sound theory. Roberts and Smith (1982) suggested that supervisees could benefit from being taught to increase their initiations in the conference. Dowling (1989) stated that a priority for future research is to determine "what can be done to enhance supervisees' ability to interact effectively in the supervisory conference" (p. 339).

CHAPTER 2

REVIEW OF THE LITERATURE

The knowledge base of the supervisory process in speech pathology will be reviewed in this section. By outlining what is known, a path for future research will be suggested. Four basic areas will be covered in this review of the supervisory process in speech pathology. First a review of models in the supervisory process will be covered. Second, supervisory methods in speech pathology will be outlined. Third, a review of the extensive investigation into components of the supervisory conference will be provided including studies of supervisory conference effectiveness. Fourth and last, a discussion of the limited research into variables that may play a role in modifying supervisory interaction will be described.

Models of Supervision

Supervision for the purpose of clinical training emerged concurrent with the appearance of the speech disorders profession in the 1920's (Farmer & Farmer, 1989). The development of this area of specialty was slow, prompting Anderson to refer to supervision as the "neglected component of the profession" (cited in Anderson, 1988, p. 13). In the 1970's there was a sudden expansion of interest and investigation into the supervisory process. Conferences, dissertations, journal articles and conference presentations about the supervisory process in the profession appeared. In addition three textbooks on the supervisory process, two in speech pathology (Oratio, 1977; Schubert, 1978) and one in audiology (Rassi, 1978) were published.

This interest continued into the 1980's with an unprecedented amount of research and additional textbooks (Anderson, 1988; Crago & Pickering, 1987; Farmer & Farmer, 1989). In addition, special interest groups in supervision have become part of the national organizations of the American Speech-Language-Hearing Association and the Canadian Association of Speech-Language Pathologists and Audiologists. Despite this growth, supervision research in speech pathology is still considered to be in its infancy, with the state of the art being a continued need to provide an empirical base to support the process and practice of supervision in clinical training (Anderson, 1988; Shapiro & Anderson, 1989). Among the first attempts to clarify the supervisory process are models of the process itself.

Oratio (1977) described a model as a convenient vehicle for thought about a process and for delineating the best method of obtaining desired results. There is considerable overlap in knowledge about the supervisory process in the helping professions. In describing and structuring the process for speech pathology, the profession has drawn heavily on pioneering work in the fields of education, social work, counselling and business management. The contribution of these fields relative to particular models for speech pathology will be included in descriptions of the supervision models in speech pathology.

Molar Model

Oratio (1977) developed the Molar Model of supervision in response to a need for improvement in the clinical training process. Supervision is seen as the central activity in the model and tied into the other activities of "observation, analysis, post-

therapy counselling, didactic teaching, micro-therapy, live demonstration and actual clinical practice" (Oratio, 1977, p. 130). These activities relate to clinician skill areas of "technical knowledge, clinical skill, self-exploration and behavioral change" (Oratio, 1977, p. 131). In this model, didactic teaching accomplishes the educational aspects of transition from classroom to clinic and leads to increased technical knowledge for the supervisee. Clinical practice and demonstration lead correspondingly to an increase in clinical skill. Supervisee self-exploration is seen as the primary purpose of post-therapy conferencing. Through these activities as well as through observation, areas of desired behavior change are selected. Micro-therapy, in which a student focuses on a specific skill during a limited time, is seen as a vehicle for behavior change. Observation and analysis are additional activities for encouraging behavior change in the student clinician.

The goal of the supervisory process in this model is a "fully functioning, self-scrutinizing professional" (Oratio, 1977, p. 131).

Rogerian Orientation

In building on the work of Dussault (1970) in teacher education, Caracciolo, Rigrodsky and Morrison (1978) applied principles of Rogerian psychology to a model of the supervisory relationship in speech pathology. The authors saw a logical correspondence between Rogers' helping relationship in psychotherapy and the supervisory relationship.

There are three critical variables in this model. The first is *conditions*, which refers to the interpersonal qualities offered by the helper. These include the qualities

of positive regard, empathetic understanding, and congruence. Caracciolo, Rigrodsky and Morrison (1978) believed that, when the supervisor displayed sufficient levels of these qualities, the student clinician or 'helpee' would become increasingly able to change and grow professionally. The second variable is *process*. This variable is the bridge between the other two in which the supervisee begins to reorganize or modify clinical behavior to more closely match an ideal professional concept. *Outcomes*, the final variable, refers to the product of the relationship in which the supervisee obtains a more accurate self-perception of clinical effectiveness and clinical ideal.

This model emphasizes the need for supervision to be differential based on the ability and experience of the supervisee, necessitating a mixture of direct and indirect supervisory behaviors. The goal of the process is stated as "professional independence and accountability for one's own clinical behavior" (Caracciolo, Rigrodsky, & Morrison, 1978, p. 287).

Trigonal Model

This model developed by Farmer and Farmer (1989) organizes the supervisory process into three components. The people involved in the process are the *Constituents*, the ideas and knowledge of the supervisory process are the *Concepts*, and the environments in which supervision takes place are the *Contexts*. The *Concepts* component is where Farmer and Farmer (1989) discuss the theoretical orientation of their approach to supervision. Differential supervision is described as the individualization of experience to produce an optimal learning experience. Both direct and indirect supervisory behaviors are seen as essential to accomplish

differential supervision. Consistent with other models, the goal of the supervisory process is development of an independent professional with self-analysis and problem-solving abilities.

Clinical Supervision or Colleagueship Model

Anderson (1988) related clinical supervision concepts from teacher education (Cogan, 1973; Goldhammer, 1969) to speech pathology. This model emphasizes joint-problem solving in a collaborative relationship. Supervision is proposed to be on a continuum with specific styles of supervision appropriate to each stage on that continuum. In the *Evaluation-Feedback* stage the appropriate style is Direct-Evaluative, with the supervisor in charge of all decision making and evaluation. This stage is seen as appropriate for the beginning or marginal student. The intent of supervision at this level is to move the supervisee along the continuum to the *Transitional Stage* to guard against supervisee dependence. In the *Transitional Stage*, a collaborative supervisory style is used. This style incorporates a mixture of direct and indirect behaviors, the choice of either being dependent on student needs. A collaborative supervisory style will be appropriate during most of the clinical training career of most student clinicians. Increased self-evaluative skills are fostered, leading the student to the final stage of *Self-Supervision* with a consultative supervisory style. During the course of clinical training and a professional career, the supervisee will move up or down the continuum when faced with new clients or situations. The self-supervision stage is reached when the supervisee has an accurate perception of clinical strengths and weaknesses and is able to seek assistance when



required.

In this model the components of the supervisory process are *understanding the process, planning, observing, analyzing, and integrating*. These components are circular in structure with *integrating* leading to renewed *planning*. The components of *understanding* and *planning* seek to prepare the supervisee to actively participate in both the clinical and supervisory process. In *observation*, an objective approach without evaluation is stressed to minimize supervisor bias and encourage supervisee analysis. In the *analysis* phase observational data on the clinical and supervisory process are examined leading to generalizations and some evaluations during *integration*.

Supervisee participation in all levels of the supervisory process is central to this model. The goal of a self-supervising, independent professional is encouraged through such participation. The clinical supervision model has become widely accepted in speech pathology, with the very term having generic qualities.

Summary

Review of these models has shown that, although constructs and components differ, they have in common a desire for differential supervision, active supervisee participation and a recurring theme of clinical autonomy as the ultimate goal of the supervisory process. Farmer and Farmer (1989) have referred to supervision models with this orientation as *Human Resources Supervision*. This theoretical orientation views the supervisee as a unique individual requiring different types of supervisory interaction at different stages. Shared decision making is emphasized in this process

which "seems to provide the necessary integration between person and organization, personality and accomplishment, relationships and tasks" (Farmer & Farmer, 1989, p. 57).

Human Resources Supervision is seen by many as the model of choice for interaction with student clinicians in counselling (Borders, 1989; Boyd, 1978; Bradley, 1989), and education (Buttery, 1988; Dussault, 1970; Goldsberry, 1988).

These models merely provide a framework for discussing and organizing a theoretical supervision orientation. Implementation of differential supervision requires the use of specific methods or approaches. Some supervision methods found in the literature will be discussed in the next section.

Supervisory Methods

Approaches to supervisory interaction can be divided into two broad categories, dyadic and group supervision. Dyadic supervision, in which a supervisor and supervisee interact, is referred to as the *traditional method*. Group supervision includes a variety of methods, some of which follow.

Traditional Method

This is the most common form of supervision in speech pathology. Farmer and Farmer (1989) compare and contrast dyadic (traditional) supervision with other methods. The main benefit of the traditional method is the ability of the supervisor to focus on the special needs of individual supervisees. Areas of concern with this method include a tendency for supervisee dependence, a lack of variety in ideas and methods, and an increased risk for encouraging a superior/subordinate relationship.

Empirical support for some of these concerns will be discussed in a later section.

Wholistic Supervision

Farmer and Farmer (1989) describe this supervision method as a team approach to diagnosis and treatment. The team includes the supervisor, supervisee, clients and significant others to encourage collaboration in establishing and achieving goals. This approach is seen as decreasing the propensity for the supervisor and supervisee to establish superior/subordinate roles and to encourage increased supervisee participation in the supervisory process. These assumptions have not been tested.

In Absentia Supervision

This is another method of group supervision, however, this one incorporates peers in the absence of the clinical supervisor (Farmer & Farmer, 1989). Supervisees meet as a group with an agenda. This meeting is videotaped for the supervisor, who views it and makes comments to the group. The use of peers supposes an increased participation of student clinicians due to the inherently collaborative supervisory style of peers. There has not been sufficient investigation to support this assumption, however.

Teaching Clinic

Dowling (1979) adapted the teaching clinic from work in teacher education. The teaching clinic utilizes peers in a structured supervision format. In this approach the demonstration clinician brings a video-tape of a therapy session for group discussion. The clinical supervisor is involved as clinic leader. Peers fill the roles of

group monitor and peer supervisors. During viewing of the video-tape, emphasis is on data collection. Comments during the critique and strategy development phase must be based on data collected during the observation. Dowling (1979) suggested that participation in the teaching clinic encourages student clinician involvement in the supervisory process and stimulates self-evaluative behavior. A great deal of research on this supervisory method has been conducted and will be discussed in a later section.

Summary

A brief review of supervisory approaches used in speech pathology has been given. The traditional method of one-to-one supervision is used most commonly. It has been suggested that this method may not encourage self-analytical, independent clinicians. Also reviewed were group supervisory methods, some of which incorporated peers. The purpose of these alternative methods is to encourage supervisee participation and independence, which are consistent with the goals of a Human Resources Supervision Model.

Models of the supervisory process and supervision methods have been described. Although the clinical supervisory model described is becoming widely accepted, there is no empirical support for its use. Borders (1989) suggested a halt on model development, with continued energy directed towards experimental studies of existing models. Thus, the next step in investigation of the supervisory process is evaluation of the supervisory process. Through such investigation, the extent to which current practice matches expectations of Human Resources Supervision can be

seen. An impressive body of knowledge in conference interaction exists in the field of speech pathology. This literature will be reviewed in the next section.

Studies of the Supervisory Process

A great deal of investigation into identification and categorization of the supervisory process has been undertaken. Components studied include the interpersonal relationship between supervisor and supervisee, conference variables, and participants' perceptions of the process. Because the "essence of supervision takes place in the conference" (Oratio, Sugarman & Prass, 1981, p. 40), the conference is the focus of most investigations.

Methods and Terminology

In order to discuss the results of these studies a review of methods and terminology will be presented.

Conference analysis systems. The tools used for analysis of the supervisory conference can be divided into low and high inference ratings. Low-inference systems classify specific behaviors and require few subjective judgements from the rater. These systems provide data on frequency of occurrence of specific behaviors. In contrast, high-inference systems code general behaviors and require subjective ratings on the part of the user. High-inference systems are suggested for investigation of users' perceptions of the events being evaluated. The use of both types of systems has been suggested to best analyze the effectiveness of the supervisory process (Smith & Anderson, 1982b).

Direct/Indirect conference variables. In discussing results of studies, the terms

direct and *indirect* are used extensively. Blumberg (1980) used the terms to describe interaction in teacher education. In Blumberg's application a teacher is the supervisee, and an administrator is the supervisor. Direct supervisory behaviors were seen as *defense-inducing*, and included "telling, giving opinions and suggestions, directing, criticizing, suggesting change, and evaluating" (Anderson, 1988, p. 40). Indirect supervisory behaviors were viewed as *support-inducing* and included "accepting and clarifying the teacher's questions, praising teacher behavior, asking teachers for their own opinions and suggestions, involving them in problem solving, adapting their ideas, and discussing teachers' feeling about the relationship between the supervisor and the supervisee" (Anderson, 1988, p. 40). Anderson (1988) has stated that these terms may not be able to describe the full range of behavior between supervisor and supervisee. The terms *active* and *passive* are suggested in addition to direct and indirect. Theoretically, the ideal supervisor role in the clinical supervision model would be indirect and active (Anderson, 1988).

Perceptions of the Supervisory Process

Smith and Anderson (1982a) state that a first step in studying supervision is "to isolate those factors perceived to be indicators of effective supervisory conference interactions" (p. 244). Blumberg (1980) investigated supervisee and supervisor perceptions of supervisory style and conference interaction in education. Perceptions of teachers and their supervisors were found to differ. If supervisors and supervisees have differing perceptions of the process in speech pathology, productivity and communication could be adversely affected. The following studies looked at variables

of perception.

Smith and Anderson (1982a) developed a high-inference rating system to investigate perceptions. The Individual Supervisory Conference Rating Scale (ISCRS) was developed to isolate factors perceived by supervisors and supervisees and to determine the "relationship of perceptions of conference behavior by supervisors and supervisees" (Smith & Anderson, 1982a, p. 244). Reliability and validity were established for this rating scale of 16 items on a 7 point scale. Results isolated three factors from supervisor ratings. These were direct supervisory behavior, passive clinician behavior and indirect supervisory behavior. The same three factors were present in supervisee ratings. However, the relationship among the ratings between supervisor and supervisee were weak, indicating that they had separate views about the supervisory conference. The authors concluded that supervisors need to be aware of the possibility for differing perceptions and discuss these with supervisees.

Using the same rating scale, Brasseur and Anderson (1983) looked at the ability of supervisors and supervisees to perceive direct and indirect supervisory styles. They used video-tapes of scripted supervisory conferences in a descriptive comparison design. The perceptions of supervisors, graduate and undergraduate clinicians were compared with the ISCRS. The three groups rated direct, indirect and direct/indirect conferences similarly. It is reasonable to assume that the three groups might not agree so closely when rating their own conferences.

In a different study on perception Dowling and Wittkopp (1982) looked at supervisees' perceived needs within the supervisory process. Supervisee needs were

found to change with experience level. This result supported the concept of a need for differential supervision.

The perceptions of interpersonal conditions were investigated by Caracciolo, Rigrodsky and Morrison (1978). They found that supervisees perceived the interpersonal aspects of their relationship with the supervisor positively at all points during the supervisory term.

Oratio, Sugarman, and Prass (1981) used multiple regression to analyze supervisees' perceptions of supervisory effectiveness. They found that the majority of total effectiveness variance was related to interpersonal factors, specifically supervisor respect and empathy for, and appropriate confrontation of, the student. Thus it appears that interpersonal variables play a large role in supervisee perception of supervisory effectiveness.

Interpersonal Conditions

The importance of interpersonal variables has been discussed in the Rogerian model of supervision and review of perceptual studies. Caracciolo, Rigrodsky and Morrison (1978) state that the "supervisor's strength as a change agent lies within the realm of interpersonal skills" (p. 467). Several studies have looked at interpersonal factors in the supervisory conference.

McCrea (1980) investigated supervisee self-exploration and facilitative supervisory behavior based on the Rogerian Model. Facilitative behaviors measured were Empathetic Understanding, Respect, Facilitative Genuineness, and Concreteness. McCrea (1980) found minimal levels of facilitative behaviors and no differentiation of

behavior with more experienced clinicians. Trained raters analyzed the conferences, removing problems of self-perception present when supervisors or supervisees analyze their own conferences. Despite the low levels of facilitative behavior found, supervisees rated the facilitative behaviors of their supervisors highly. Thus supervisees may have been perceiving a more positive interpersonal relationship than existed in a Rogerian framework. This phenomenon was also noted in a study of counselling supervision which revealed contradictions between perceptions and reality of supervisor behaviors (Martin, Goodyear & Newton, 1987).

A descriptive, qualitative design was used by Pickering (1984) in evaluating interpersonal aspects of the conference. In a naturalistic approach, she used open concepts as well as *a priori* categories in her analysis. Findings were that conference discussion focused on cognitive issues relating to the client. Supervisor and supervisee conversation did not include personal feelings or interpersonal topics, although these topics were recorded in diary-style journals of both parties.

Research into interpersonal variables in supervision has shown that supervisees view the interpersonal relationship positively, but there is little empirical support for this perception. Little if any facilitative interpersonal conversation takes place in the conference. The following studies discuss the categories of conversation that are found in supervisory conferences.

Supervisory Conference Content

Hatten (1966) produced the first description of the supervisory conference in speech pathology. Supervisors dominated the conference through increased talk time.

Topics changed frequently in the conference, with the majority of discussion focusing on therapy techniques and clients' qualities. Not surprisingly, little time was spent discussing interpersonal matters.

Underwood (1973) used a low-inference system adapted from the work of Blumberg (1980) to describe the conference. Results revealed highly direct supervisory behavior and passive supervisees.

A low-inference system was adapted from the work of Boone and Prescott (1972) by Culatta and Seltzer (1976). The Content and Sequence Analysis System was used to analyze supervisory conferences and revealed again a dominant supervisor and no change in supervisory behavior over time. Culatta and Seltzer (1977) extended their original study by providing supervisors with feedback about their conference behavior through the conference interaction system. Although supervisors reported positive reaction to the feedback and established goals for their own behavior change, no change was seen. In contrast, change has been reported in the clinical behavior of student clinicians who analyze their behavior with the Boone and Prescott system (Boone & Prescott, 1972). Dowling, Sbaschnig, and Williams (1982) looked at reliability and validity of the Culatta and Seltzer system and found problems with both content and construct validity. They supported use of the tool for non-research purposes only.

Validity and reliability for the Multidimensional Observational System for the Analysis of Interaction in Clinical Supervision (MOSAICS) was established by Smith and Anderson (1982b). This system is based on work in education by Weller (1971).

MOSAICS provides information about content and process by coding items of verbal communication along four dimensions (speaker, pedagogical move, substantive areas and substantive-logical meanings) and into 23 categories (See Appendix A). These categories are used to calculate four critical ratios. The initiatory/reflexive ratio (I/R) compares moves which initiate topics to those which respond to another. The analytic/evaluative ratio (A/E) compares processes based on facts to processes based on judgements. The diagnostic/prescriptive ratio (D/P) compares processes related to past action to processes related to planned or suggested actions. The complex/simple (C/S) ratio compares statements that relate statements and other factors to statements that involve a single element. These ratios represent process and content in the supervisory conference. Significant correlations were found between the verbal content of the conference and the directness or indirectness of supervisory behavior.

Roberts and Smith (1982) calculated critical ratios for supervisors and supervisees during three supervisory conferences over a 6 week period. The I/R ratio was the strongest measure of role difference. This ratio was .473 for supervisors, indicating that supervisor behavior was equally initiatory and reflexive. The supervisee I/R ratio of .139 indicated that only 13% of the student moves were initiatory in nature. These results showed that supervisors dominate the conference through their initiating behaviors and that supervisees adopt a passive, reflexive style. The critical ratios showed consistency over time. The results support those of Culatta and Seltzer (1976), revealing that supervisor behavior does not change over time or in response to differing levels of ability in the supervisee.

The final investigation to be discussed is that of Tufts (1984). This study looked at conference content with a low-inference system. The analysis indicated that primary conference topics were clinical procedures and lesson analysis. No difference in categories was seen between experienced and inexperienced supervisees.

Studies of Supervisory Effectiveness

As stated earlier, ASHA has suggested that supervisory effectiveness has not been documented in speech pathology. A few studies have looked at the issue of effectiveness.

Goodwin (1977) looked at the occurrence of specified therapy behaviors in three supervisory conference conditions; no conference, 12 minute conference, and 25 minute conference. Findings indicated treatment following the no conference condition was different from treatment which followed a supervisory conference. The treatment of student clinicians who received no supervisory conference was characterized by increased silence, unrelated conversation, and a decrease in feedback, demonstration cues and models. This finding supported the effectiveness of the supervisory conference. Further support was evidenced in a study by Buttery and Weller (1988). They utilized the teaching clinic group supervisory method with preservice student teachers. Student teachers were given training on questioning skills. Use of these skills was monitored in two groups, one which participated in the teaching clinic and the other which received no supervision related to questioning skills. The group involved in the teaching clinic achieved significantly more positive behavior change in questioning skills, substantiating supervisory effectiveness in the

conference.

Webster and Hagler (1989) used a single subject ABA design to compare two types of supervisory input, Directive-Specific and Progressive-Specific. The dependent variable was the use of verbal consequence of client responses during articulation therapy. No differences were found between the two types of supervisory feedback and positive change was noted in verbal consequence behavior of clinicians, indicating that both types of supervision were effective.

Shapiro and Anderson (1989) looked at the effects of "planning and documenting commitments" (p. 549) on supervisee attainment of goals based on these commitments. Commitments were made both verbally and in written form. Effects of the two types as well as order effects were considered. Results indicated that experienced clinicians worked better with verbal than written commitments. In terms of order effects, more commitments were completed when a written agreement was followed by a verbal agreement than vice versa. This study looked at actual behavior change in student clinicians as a result of the supervisory conference supporting the effectiveness of supervision.

The final study to be reported in this section on supervisory effectiveness is that of Gillam, Strike Roussos & Anderson (1990). A single subject design was used in this investigation. Supervisory procedures were found to effect positive changes in supervisees' clinical behaviors such as informative feedback and number of explanations per activity.

Summary

Discussion of conference interaction in the traditional, one-on-one supervisory method has been presented. Results of studies using both high and low inference tools were reviewed. These studies are invaluable for comparing the reality of supervision practice with the desires of Human Resources Supervision.

Supervision has been shown to be highly direct. Direct supervisory behaviors are consistent with Direct-Evaluative supervision. Indirect behaviors parallel the concept of collaborative supervision. Although it is not known which specific supervisory behaviors promote student independence, a mixture of direct-evaluative and less direct supervisory behaviors is recommended to encourage self-evaluation and autonomy (Anderson, 1988; Anderson & Smith, 1982b). Effective levels of indirect and direct supervisory behaviors will be determined by the level of experience and ability of the student clinician with more experienced and able students requiring less direct feedback. Results of three comparative studies (McCrea, 1980; Roberts & Smith, 1982; Tufts, 1984) indicated that supervisors adopted content and interpersonal sets across all conferences and all students, irrespective of differing levels of experience and ability. In two studies utilizing different conference analysis systems, Culatta and Seltzer (1976) and Roberts and Smith (1982) reported no change in supervisor behavior over a term of supervision.

The limited investigation into the effectiveness of supervision has offered tentative support that at the very least, some supervision is better than no supervision. Still to be discovered is whether or not specific types of supervisory behavior are

better than others.

Thus it appears that although supervision may promote some positive change in student clinicians, current methods in speech-language pathology supervision are contrary to the clinical supervision model supported by the profession. Supervisors do not appear to be providing differential supervision or effectively encouraging supervisee participation in the supervisory process.

Change in the Supervisory Process

Studies of the supervisory conference in speech-language pathology have revealed a passive, reflexive supervisee, whose contribution to the conference consists mainly of describing treatment session events (Culatta & Seltzer, 1976; Dowling & Shank, 1981; Irwin, 1981; McCrea, 1980; Roberts & Smith, 1982; Tufts, 1984). This behavior appears to be static across experience and ability levels of the supervisee. Several authors have suggested variables which may encourage more active participation in the supervisee and a very few research projects have looked at the effects of such variables. Areas that have been investigated are: the effect of feedback to supervisor on conference behavior (Cimorell-Strong & Ensley, 1982; Culatta & Seltzer, 1977; Hagler, 1986; Wellman, 1990), change in conference type (Dowling, 1983; Dowling, 1987; Dowling & Shank, 1981; McFarlane & Hagler 1990), and supervisee-directed change (McFarlane & Hagler, 1990).

Effects of Feedback to Supervisor

The work of Culatta and Seltzer (1977) was discussed in the section on conference content. Supervisors in the study received feedback on their conference

behavior via the Content and Sequence Analysis System and then selected behaviors for modification. No change in behavior was seen over a term of treatment. These results indicate that knowledge of the interaction in the session was not sufficient to motivate change in the supervisor.

Cimorell-Strong and Ensley (1982) also looked at effects of feedback. In that investigation, supervisors received written feedback on their effectiveness from their supervisees. Results showed that supervisors were dominant in both the feedback and non-feedback groups. The authors suggested that feedback from a person in a position of authority over the supervisor may motivate change. The Culatta and Seltzer (1976) system was used for conference analysis in the study. As mentioned earlier, reliability and validity of this system has been questioned (Dowling, Sbaschnig & Williams, 1982).

Hagler (1986) utilized a *bug-in-the-ear* as a method of feedback to the supervisor. A *bug-in-the-ear* is a form of 'live supervision' using electronic equipment. Three types of feedback were given through the *bug*. Subjects received information about the amount of their verbal behavior, social praise for talking less, and a simple directive to "try to talk less". The directive was the only method which produced a change in talk time. Thus it was shown that supervisors were capable of directed change in their conference behavior.

Wellman (1991) also explored the effects of supervisor feedback on conference behaviors. In this investigation feedback was in the form of supervisor self-exploration. Supervisors analyzed sessions with the Underwood Category System for

Analyzing Supervisor-Clinician Behavior (Underwood, 1979). Supervisors who engaged in structured self-exploration were found to be more concrete and ask more productive questions. A change was also noted in supervisees' diagnostic/prescriptive and complex/simple conference behaviors.

Change in Style or Type of Conference

The following studies attempted to modify conference interaction by changing the structure or participants of the conference.

Teaching clinic. Dowling has investigated the teaching clinic in some detail. This procedure is seen as an alternative to traditional supervision, one which may facilitate supervisee involvement. The format of the teaching clinic was discussed in an earlier section. As a review, the teaching clinic is a structured group supervisory method. Participants are clinic leader (typically the supervisor), demonstration clinician, peers, and group monitor. The demonstration clinician brings a video-tape of a treatment session which is reviewed and discussed with the group.

Dowling has investigated many components of the teaching clinic. Dowling and Shank (1981) evaluated the quality and quantity of talk in the teaching clinic conference compared to the conventional supervisory conference. The Culatta and Seltzer (1976) analysis system was used. No differences in talk behavior were found and participation by the demonstration clinician was minimal.

After questioning the reliability and validity of the Culatta and Seltzer (1976) system (Dowling, Sbaschnig, & Williams, 1982), Dowling (1983) looked at conference participation with the MOSAICS system (Smith & Anderson, 1982b). The

research question was "Do supervisors, peers and demonstration clinicians differ in quantity or type of talk during teaching clinic supervisory conferences and are the talk behaviors by the speakers indicative of a direct/indirect conference style?" (Dowling, 1983, p. 387). That study showed that supervisors, peers and demonstration clinicians could not be statistically differentiated. Comparison of the participants were made across a wide variety of dependent variables with a small number of subjects. Such a broad examination may have missed clinically significant differences between the groups. Examination of the data for individual variables showed that supervisors were more active in the conference as indicated by a higher Participation Membership ratio. In addition the supervisor had a higher initiatory/reflexive ratio, indicating that the supervisor was directive and the supervisee was a passive participant. Thus the teaching clinic was highly direct and did not encourage active participation by the supervisee. Dowling (1983) suggested that the teaching clinic may encourage self-analytical behavior as indicated by the increased number of suggestions and opinions made by peers and demonstration clinicians in the teaching clinic.

The teaching clinic is an example of a modification of the conventional supervisory method which attempts to encourage participation and increase self-analytical behavior in supervisees. Results indicated a passive supervisee with very few initiations in the conference. Thus, a drastic change in format of supervisory conference did not alter supervisee behaviour.

Peer supervision. Use of peer supervisors has been suggested as a method of

encouraging supervisee participation (Anderson, 1988; Dowling, 1979; Farmer, 1989). Peers are assumed to have an inherently collaborative supervisory style which may promote the type of self-analytical behaviour considered desirable in student clinicians. Among the advantages of peer supervision cited by Farmer and Farmer (1989) are increased comfort level and empathy between the participants, thereby possibly increasing the amount of self-analysis and directiveness used by the student clinician. The peer may also be able to provide additional perspectives on clinical issues. The peer supervisors acquire experience with the supervisory process which is important to them later as working professionals. Peers included in the teaching clinic did not appear to have the desired effects on supervisee participation. However, in the teaching clinic, the clinical supervisor is still present in the supervisory conference. The following study looked at the interaction between student clinicians and peer supervisors in a dyadic conference.

McFarlane and Hagler (1990) compared the initiatory/reflexive (I/R) ratios of supervisors and supervisees in two supervisory conditions, conventional supervision and peer supervision. Audio-tapes of conferences were analyzed with MOSAICS (Smith & Anderson, 1982b). Results revealed that supervisory moves of peer supervisors were less initiatory than those of clinical supervisors. Although it is not surprising that the peer and clinical supervisors behaved differently in the conference, the authors noted that the mean supervisee I/R ratios were virtually identical under both conditions. Even though the peer as supervisor seems to epitomize the colleagueship model of supervision, students were not more initiatory in conference

with a peer. McFarlane and Hagler (1990) suggested a need to rethink past explanations of supervisor's apparent inability to alter their largely direct-evaluative supervisory behavior. The expectations of student clinicians and their willingness to respond to less direct supervision may be an influential variable in supervisors' ability to change.

McFarlane and Hagler (1990) reported an unexpected result. The mean I/R ratio of students in the role of supervisor was significantly higher than the mean I/R ratio of students in the role of supervisee. It was concluded that this was the result of their having entered each situation with a predisposition to behave in a certain way. Students, as peer supervisors, were found to demonstrate a mixture of initiatory and reflexive behaviors with evidence of the ability to formulate pertinent questions and engage in analysis. Students, as supervisees, were found to be passive and reflexive and engage in little analysis. It seemed that participants' interactive style may have been a necessary consequence of a narrow view of their role during the conference.

Supervisee-directed Change

In describing conferences using the collaborative style, Anderson (1988) states that planning by setting of agenda items is valuable and that planning for the maximum participation of the supervisee is necessary. Several authors have discussed use of an agenda as a device for planning the supervisory conference. Peaper (1984) obtained questionnaire responses from two groups of graduate students regarding the perceived value of the supervisory conference. The group which prepared a conference agenda rated conferences positively as did the group which did not prepare

an agenda. The group which prepared an agenda felt an increased desire to determine conference content. Farmer and Farmer (1989) include a conference agenda prepared by supervisee, supervisor or both in In Absentia Supervision. The Student Initiated Conference Protocol (Mawdsley, 1989) was developed to encourage supervisees to become actively involved in conference planning. Supervisors who agreed to let their students utilize this tool reported positive reactions.

McFarlane and Hagler (1990) looked at the effects of a supervisee prepared agenda on conference interaction with a peer. Use of an agenda in this context produced dramatic results. Although a peer as supervisor did not affect the initiatory behavior of student clinicians, their use of the agenda caused an increase in student clinician initiations and a decrease in peer supervisor initiations. The authors suggested further research to determine the effects of an agenda when applied to a traditional supervisory pair, as the agenda appeared to have potential as a catalyst for positive change in conference interaction.

The last component of the McFarlane and Hagler (1990) study looked at the effects of role expectations on conference behavior in a peer supervision format. They hypothesized that students may have preconceived expectations to take on a passive role in the conference that are perpetuated by the label "student clinician". In that study student clinicians became "team leaders" and peer supervisors became "observers". This comparison measured the effects of semantic role manipulation. Student clinicians with a title of authority were found to be more initiatory in conferences with a peer. Initiatory behavior of peer supervisors was not affected by

the change in title. Student clinicians responded strongly and positively to the change in title. This suggested that they perceived their roles differently in the two conditions and responded differentially despite the fact that the roles were defined identically in their instructions. Thus their label was more salient to them than their instructions.

Summary

The studies reviewed in this section have looked at variables of change in the supervisory interaction. Studies which attempted to motivate change through feedback to the supervisor achieved mixed results. Hagler (1986) and Wellman (1990) documented supervisors ability to modify their conference interaction. Missing from these studies is an indication of the effects of supervisor change on the supervisee. It is important to note, that there is no empirical evidence that current supervisory methods are ill advised or that modification of supervisor behavior will affect supervisees' involvement in the conference. Despite this, recent research has focused on the supervisor as the catalyst for change in the conference.

Studies which manipulated the structure or participants of the conference produced interesting results. In both the teaching clinic and peer supervision studies, supervisee participation remained low. The peer as supervisor seems to epitomize the colleagueship model of supervision. The peer has no authority over the student clinician and can not be viewed as a superior. Yet the supervisee remained passive. These results suggest a new view of the static nature of the supervisory conference. Student clinicians seem unwilling to accept responsibility for setting the content or

tone of the conference, even in the non-directive presence of a peer. The fact that supervisor behavior tends not to change over time may relate less to the supervisor's unwillingness or inability to change and more to the supervisee's own role perception. It seems then that direct intervention with the supervisee may be a logical approach to facilitating change in the supervisory process. In targeting change through the supervisee in the peer conference, McFarlane and Hagler (1990) achieved positive results with semantic role manipulation and the supervisee-prepared agenda. The agenda appears to be an easily implemented, time efficient, theoretically sound device for changing the most salient aspect of the conference, that is, which party determines the content.

An overview of the supervisory process in speech-pathology and audiology has been provided. Models of the process encourage differential supervision and active participation of the supervisee in the conference. Studies of the traditional method of dyadic supervision have shown that differential supervision does not occur and that the supervisee is passive and reflexive in the conference. In attempting to produce change in the conference, intervention with the supervisor has produced minimal change in supervisor behavior, and minimal evidence that changes in supervisor behavior effected change in supervisee involvement has been seen.

Purpose

The study investigated a method of producing positive change in the supervisory process through direct intervention with the supervisee. The need for systematic investigation in this area has been expressed by many researchers. Roberts

and Smith (1982) suggested that supervisees could benefit from being taught to increase their initiations in the conference. They felt that such an increase in initiations would produce a conference which better fulfilled the desires of Human Resources Supervision. Dowling (1989) stated that a priority for future research is to determine "what can be done to enhance supervisees' ability to interact effectively in supervisory conferences" (p. 339).

Change in the conference was approached through use of a supervisee-prepared agenda. As previously discussed, the agenda is a theoretically sound, easily implemented device for planning the supervisory conference. The agenda has also been shown to produce a dramatic change in the conference content and verbal interaction between student clinicians and their peers.

The effects of agenda use on the conference between a student clinician and clinical supervisor were investigated in this study. As suggested by Smith and Anderson (1982b), a high-inference system was used to analyze perceptions of the conference in conjunction with a low-inference system to categorize conference behavior. Smith & Anderson (1982a) state that "investigation of actual conference effectiveness in the supervisory process may be determined through the use of both high-inference and low-inference measures" (p. 248). Measures of supervisory conference content were obtained with the adapted MOSAICS system (Smith & Anderson, 1982b). A measure of perceived indirect supervisory behavior was obtained via the Individual Supervisory Conference Rating Scale (ISCRS) (Smith & Anderson, 1982b).

The following research questions were addressed in this study:

○ Active Involvement

1. Does use of a supervisee-prepared agenda result in fewer supervisor initiatory moves in the conference as compared to a control group?
2. Does use of a supervisee-prepared agenda result in more supervisee initiatory moves in the conference as compared to a control group?

○ Differential Supervision

3. What are the relationships between supervisee experience variables and supervisor and supervisee conference behaviors in conferences without a supervisee-prepared agenda?
4. What are the relationships between supervisee experience variables and supervisor and supervisee conference behaviors in conferences with a supervisee-prepared agenda?

○ Self-Analysis

5. What are the relationships between supervisor and supervisee initiatory behaviors and other supervisor and supervisee conference behaviors in conferences with a supervisee-prepared agenda?

○ Conference Perception

6. Does use of a supervisee-prepared agenda result in an increased supervisor perception of indirect supervisory behavior in the conference as compared to a control group?
7. Does use of a supervisee-prepared agenda result in an increased

supervisee perception of indirect supervisory behavior in the conference
as compared to a control group?

CHAPTER 3

METHODOLOGY

Subjects

All subjects in this study were volunteer participants obtained through clinical coordinators at eight university training programs in speech-language pathology, three in Canada and five in the United States. Student clinicians involved in clinical placements during the period of January to April 1991 were eligible to participate. Student clinician/supervisor pairs were selected on the basis of their independent, mutual agreement to participate. Twenty-three student clinician/supervisor pairs agreed to participate and were randomly assigned to the experimental or control group. Three of these pairs did not complete the requirements of the project and two audio-tapes were unintelligible and therefore excluded from analysis. The remaining eighteen pairs formed the subject base for this study.

All clinical supervisors had worked professionally for at least one year and represented the following types of practicum sites: 1 rehabilitation centre, 6 university clinic, 2 school, 3 acute care hospital, 1 community health, 2 special needs pre-schools and 3 children's centre. Supervisors' experience as clinicians ranged from 1 to 21 years ($M=9.4$) and they had supervised between 1 and 135 previous students ($M=29.3$). Ten had received previous training in supervision in the form of conference or inservice presentations. Independent samples t-tests were used to compared supervisors in the control and experimental groups on the demographic

data. No significant differences were noted between group means (Table 1).

Student clinicians ranged in age from 19 to 44 years ($M=25.6$) and had obtained between 8 and 516 clinical treatment hours ($M=209.1$). Eight were graduate students and ten were undergraduate students. Independent samples t-tests were used to compare the student clinicians in the control and experimental groups on the demographic data. No significant differences were noted between group means (Table 2).

Table 1 Demographic Data SUPERVISOR

	Experimental Group Mean	Control Group Mean	t value	Probability
# years exp. as S-LP	9.29	9.56	-.073	.943
# previous students	28.7	29.8	-.046	.964

Table 2 Demographic Data SUPERVISEE

	Experimental Group Mean	Control Group Mean	t value	Probability
Age	28.29	23.8	1.244	.233
Previous related exp.	1.86	5.4	-1.344	.199
# clinical clock hours	213.63	205.5	.115	.91
# weeks in placement	8.63	8.1	.662	.518
# hours in placement	30.25	27.0	.407	.6898

Instrumentation

Multidimensional Observational System for the Analysis of Interactions in Clinical Supervision (MOSAICS)

The MOSAICS system as adapted by Smith (1982b) for use in speech pathology was used to analyze the supervisory conference behavior of both supervisors and supervisees (Appendix A). Smith and Anderson (1982b) established reliability and validity of this system for use in speech-pathology. They recommended 21 of the verbal interaction/content variables for use in research. The five critical ratios used in this study were included in the recommended variables and are described below:

1. *The initiatory/reflexive ratio (I/R) is the extent to which each*

participant initiates or moves discourse forward (initiatory) as compared to previous moves, responses or reactions (reflexive). This ratio is:

$$\frac{\text{structuring} + \text{soliciting}}{\text{responding} + \text{reacting} + \text{summary reaction}}$$

(Weller, 1971, p. 46)

2. *The analytic/evaluative ratio (A/E) is the extent to which each participant uses processes verifiable by reference to facts, experiences, or observations (analytic) as compared to processes verified by reference to a set of criteria or principles of judgement (evaluative).*

This ratio is:

$$\frac{\text{fact stating} + \text{explaining} + \text{suggestions} + \text{explanation of suggestions}}{\text{evaluation} + \text{justification} + \text{opinions} + \text{justification for opinion}}$$

(Weller, 1971, p. 56)

3. *The diagnostic/prescriptive ratio (D/P) is the extent to which each participant uses processes that focus on the analysis or evaluation of instructional process that previously occurred or is occurring (diagnostic) as compared to actions or objectives that are recommended or assigned (prescriptive). This ratio is:*

$$\frac{\text{fact stating} + \text{explaining} + \text{evaluation} + \text{justification}}{\text{suggestions} + \text{explanation of suggestions} + \text{opinions} + \text{justification for opinions}}$$

(Weller, 1971, p. 57)

4. *The complex/simple ratio (C/S) is the extent to which each participant uses processes that relate statements, facts, evaluations, opinions, and suggestions to other factors, reasons, generalizations, or principles (complex) as compared to processes that involve a single element (simple). This ratio is:*

$$\frac{\text{explanation} + \text{justification} + \text{explanation of suggestion} + \text{justification for opinions}}{\text{fact stating} + \text{evaluations} + \text{suggestions} + \text{opinions}}$$

(Weller, 1977, p. 59)

5. *The participation membership ratio (P/M) is the extent to which each member participates in the conference interactions as compared to the total participation of all members in the conference. This ratio is:*

$$\frac{\text{speaker1 moves}}{\text{speaker1} + \text{remaining speakers' moves}}$$

(Weller, 1971, p. 47)

The critical ratios used in this study were calculated in the manner described by Roberts and Smith (1982), specifically "by dividing the sum of the categories for the first variable by the sum of the categories for the first and second variables" (p. 430). Thus the initiatory /reflexive ratio (I/R) was formed in the following manner:

$$\frac{\text{Initiatory moves}}{\text{Initiatory} + \text{Reflexive Moves}}$$

The I/R ratio was used as a dependent variable, with the other critical ratios used in correlational analysis.

Five minute segments of audio-tapes of supervisory conferences were analyzed with MOSAICS as adapted by Smith (1978) for use in speech pathology. Hagler and Fahey (1986) established the validity of using short segments of the conference when analyzed with MOSAICS. The first minute of discussion was not included in analysis, therefore analysis began at the 1 minute mark and ended at the 6 minute mark. Scoring procedures followed those of Smith (1978) and are detailed in Appendix B. (See also Appendices C and D for score forms and summary sheet.)

The Individual Supervisory Conference Rating Scale (ISCRS)

The ISCRS (Appendix E) is a valid and reliable tool for "investigating perceptions of supervisors, supervisees, and their interactions" (Smith & Anderson, 1982b, p. 248). Factor analysis of responses obtained has provided information about perceived direct and indirect supervisory behavior. Brasseur and Anderson (1983) recommend that a factor analysis be completed on this tool each time it is used for research purposes until it has been clearly shown to be a two-way measure. The dependent variable of *Perceived Indirect Supervisory Behavior* was the mean score obtained on measures of indirect behavior.

Conference Outline

The Conference Outline (Appendix F) was used as a conference agenda. This outline is a modification of Mawdsley's (1989) Student Initiated Conference Protocol. The modified outline included suggestions for discussion both in the cognitive-behavioral area as well as interpersonal, affective areas such as motivation, interest and enjoyment of session by clinician and client. This outline was completed by

supervisees in the Agenda-Yes groups to prepare them for the supervisory conference. An example of a completed outline (Appendix G) was given to the supervisee to aid in effective outline use.

Procedure

A single factor between-groups experimental design was used. The factor was Agenda Use, having two levels: Yes (Experimental $n=8$) and No (Control $n=10$).

Participants were obtained through clinical coordinators at university training programs in speech-language pathology. The coordinators were invited to participate by letter (Appendix H) and after participation was confirmed were asked to distribute letters of invitation (Appendices I & J) and informed consent documents (Appendices K & L) to all eligible students and supervisors in on-campus and off-campus placements. All instructions to control and experimental group subjects were given in written form (Appendices M, N, O, & P). There was no personal contact between the experimenter and subjects.

Control group subjects (Agenda-No) provided an audio-tape of a supervisory conference taken at mid-term in the placement. Supervisors and supervisees independently completed the ISCRS immediately after the audio-taped conference and returned the rating scales with the audio-tape.

Experimental group subjects (Agenda-Yes) used the Conference Outline (Appendix F) as a conference agenda. Student clinicians in the experimental group were provided with two Conference Outlines and one Conference Outline - Example of Use (Appendix G). They were instructed to prepare the outline and use it to guide

conversation with their supervisors on two occasions, audio-taping the occasion of second use. The audio-taped sessions occurred at approximately mid-term in the placement for both groups. As in the control group, supervisors and supervisees independently completed the ISCRS and returned it to the experimenter with the audio-tape.

Reliability

All audio-tapes were coded and scored by the researcher. To determine intrarater reliability, twenty percent of the tapes were recoded a minimum of three months later. Point-to-point agreement was 87.6% across the four levels of MOSAICS. A speech-language pathologist familiar with use of the MOSAICS provided interrater reliability on a different twenty percent of the tapes. Point-to-point agreement was 83.9% across the four scoring levels of MOSAICS. Both coders were blind to group assignment for each tape. Computer entry of all data was checked for accuracy as were the calculations of means for Perceived Indirect Supervisory Behavior from the ISCRS.

Data Analysis

Independent Variable

The independent variable was Agenda Use having two levels: Yes (Experimental) and No (Control).

Dependent Variables

The first of two dependent variables was the ratio of supervisee and supervisor initiatory/reflexive (I/R) moves. The I/R ratio was obtained from the pedagogical

moves section of MOSAICS. Because the I/R ratio is a proportion, an arcsine transformation was performed on the data. This transformation stabilizes the variances in observations of proportions (Winer, 1971). To answer questions 1 and 2 the mean I/R ratios for supervisees and supervisors were compared across the two supervisory conditions with 1-tail t-tests for independent samples. The pooled variance estimate was used after confirming homogeneity of variance.

The second dependent variable for both students and supervisors was mean Perceived Indirect Supervisory Behavior obtained from the ISCRS. This measure was used in answering questions 6 and 7. Factor analysis was applied to the rating data from the ISCRS. Previous research has shown that variables loading on the Indirect Supervisory Behavior factor are different for supervisee and supervisor (Smith & Anderson, 1982b), therefore separate factor analyses should be conducted. It is logical that the two parties may perceive specific behaviors differently. Use of the ISCRS to measure supervisory behavior across conditions has not been reported in the literature. It seemed possible that variables loading on the Indirect Supervisory Behavior factor would differ between conditions just as they did between subject groups. To confirm the variables perceived as indicators of indirect supervisory behavior, four separate factor analyses were conducted on data from the ISCRS. These four analyses were (1) control group supervisors, (2) control group supervisees, (3) experimental group supervisors, and (4) experimental group supervisees.

In order to answer question number 6, mean Perceived Indirect Supervisory Behavior obtained from supervisors in the control group was compared to that in the

experimental group. This comparison should only be made if the variables loading on the Perceived Indirect Supervisory Behavior factor are the same in each condition. Yet previous research indicated that this was unlikely to be the case. In comparing group means between conditions, mean Perceived Indirect Supervisory Behavior was calculated only on variables that loaded on the indirect factor in **both** the control and experimental group. This procedure was followed in comparing the Perceived Indirect Supervisory Behavior obtained from supervisees. Mean Perceived Indirect Supervisory Behavior obtained from supervisors and supervisees was compared across the two conditions. This ordinal level data was analyzed with the Mann-Whitney U-test. The level of significance for both the t-test and Mann-Whitney U-test was made more stringent to compensate for increased experiment-wise error rate resulting from two comparisons made on the same subjects. The error rate was calculated as: Error rate (per comparison) = $.05/2(\text{number of comparisons})$ (Kirk, 1968).

Predictor and Criterion Variables

Predictor variables were the supervisee experience variables of previous clinical clock hours, age, related work experience, number of weeks in the placement and number of hours in the placement. Criterion variables were the critical ratios for supervisor and supervisee. To answer questions 3, 4, and 5, correlational analyses were computed with the Pearson product moment correlation (Feldman, Gagnon, Hofmann, & Simpson, 1988). Data from the control and experimental groups were analyzed separately in recognition of the potential impact of the experimental condition on interrelationships among variables.

CHAPTER 4

RESULTS

Descriptive, comparative and correlational analyses conducted with the critical ratios from MOSAICS will be presented. Factor analyses and comparative statistics conducted on the ISCRS will follow.

Analysis of MOSAICS Data

Descriptive Statistics

Descriptive data for the critical ratios of supervisee and supervisor were calculated and are described in Tables 3 and 4 and in Figures 1 through 4. Upon visual comparison, an increase in the supervisee I/R and C/S ratios was noted in the experimental group. In visually comparing the supervisor critical ratios a decrease in the I/R and D/P ratios was noted. Although group means were compared statistically only for the I/R ratio, a general impression of the conference is available through visual comparison of the critical ratios obtained in the two supervisory conditions.

Table 3 Descriptive statistics: Control group critical ratios

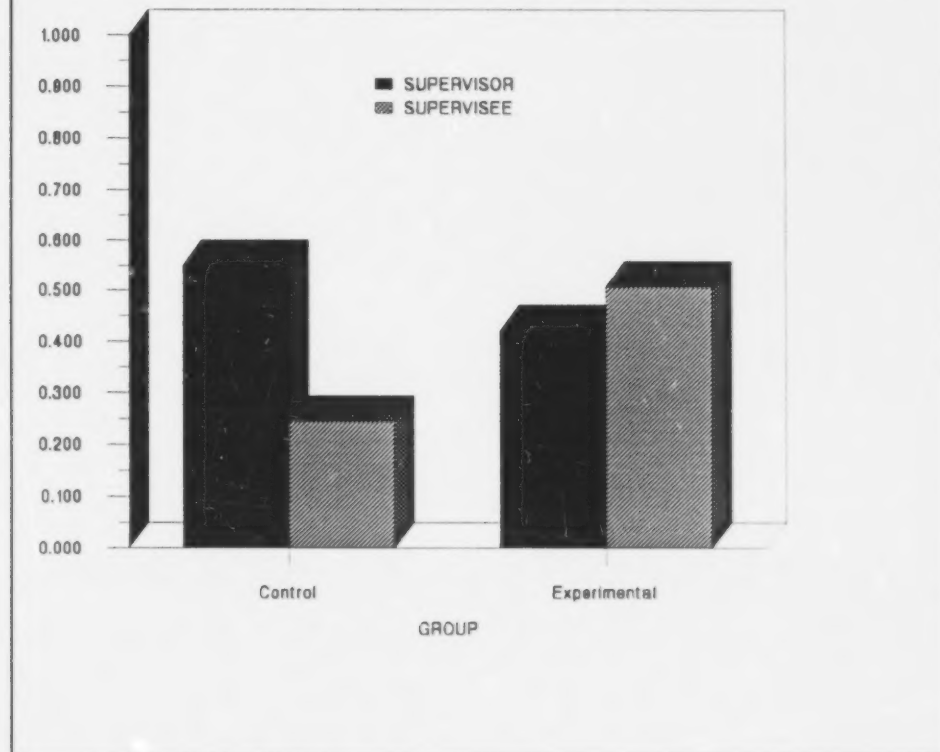
Ratio	Mean	Std.Dev	Minimum	Maximum
I/R Sor	.550	.182	.31	.88
I/R See	.244	.202	0.0	.75
C/S Sor	.422	.209	.13	.78
C/S See	.354	.192	.13	.75
A/E Sor	.743	.18	.52	1.0
A/E See	.857	.16	.50	1.0
D/P Sor	.847	.117	.67	1.0
D/P See	.877	.109	.71	1.0

Table 4 Descriptive Statistics: Experimental group critical ratios

Ratio	Mean	Std.Dev	Minimum	Maximum
I/R Sor	.422	.189	.1	.75
I/R See	.507	.211	.2	.78
C/S Sor	.463	.275	0.0	.86
C/S See	.569	.138	.38	.75
A/E Sor	.691	.332	0.0	1.0
A/E See	.821	.205	.4	1.0
D/P Sor	.641	.205	.38	1.0
D/P See	.752	.172	.58	1.0

Sor = Supervisor See = Supervisee

Figure 1 Mean Initiatory/Reflexive Ratios by Condition



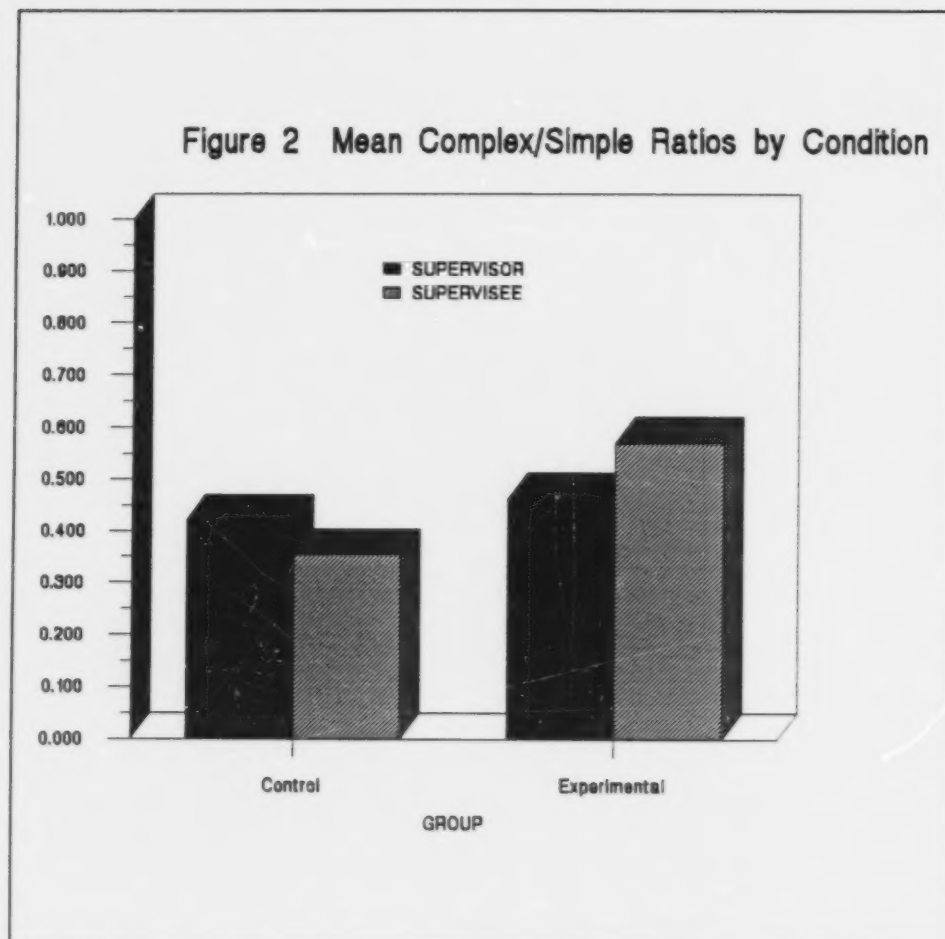
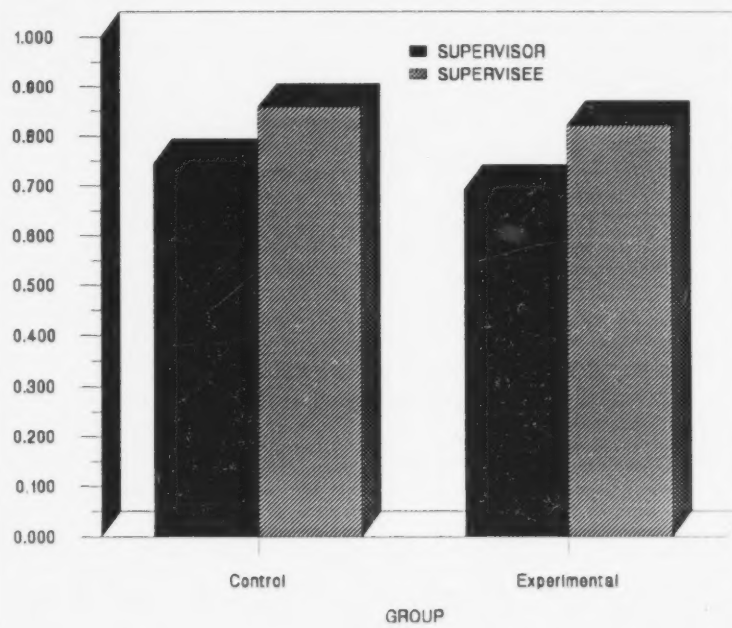
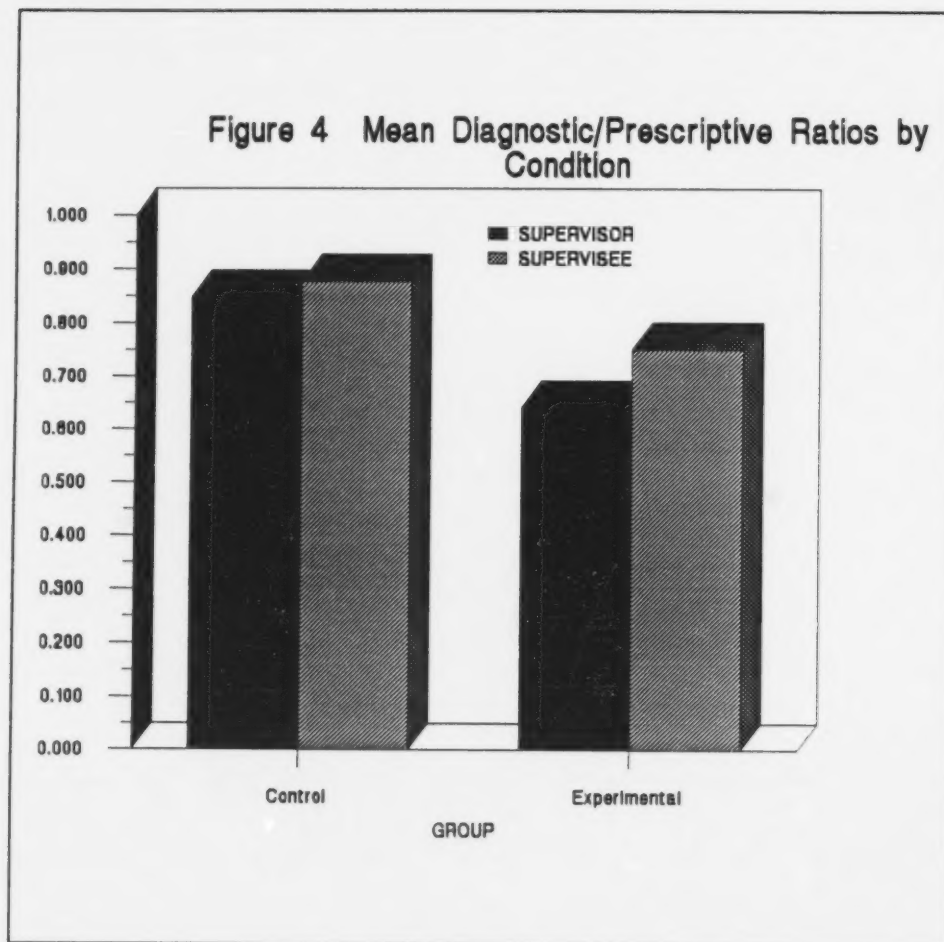


Figure 3 Mean Analytical/Evaluative Ratios by Condition





Comparison of Group Means

Before use in calculation of the t-test, the I/R ratios for all individual supervisees and supervisors were transformed with the arcsine transformation (Winer, 1971). Comparison of the variances for supervisors' I/R ratios in the control and experimental conditions with the F test for homogeneity of variance ($F = 1.17$, $p = .852$) indicated that the pooled variance estimate could be used to calculate t. Results of the t-test comparing the mean supervisor I/R ratio in the control group ($\bar{M} = .600$) with the mean supervisor I/R ratio in the experimental group ($\bar{M} = .446$) was not significant ($t = -1.43$, $p = .086$) (Table 5). (Note that the means reported in these tables differ from those found in descriptive statistics. This is due to the transformation of the ratios.) A correction for increased experimentwise error rate was applied because two comparisons (I/R ratio and Perceived Mean Indirect Supervisory Behavior) were made on the same subjects. A more stringent error rate was calculated as: Error rate (per comparison) = $.05/2$ (number of comparisons) (Kirk, 1968).

Comparison of the variances for supervisees' I/R ratios in the control and experimental conditions with the F test for homogeneity of variance ($F = 1.19$, $p = .790$) likewise indicated that the pooled variance estimate could be used to calculate t. The mean I/R ratio of supervisees in the control group ($\bar{M} = .256$) was significantly lower than the mean I/R ratio for supervisees in the experimental group ($\bar{M} = .549$) ($t = 2.58$, $p = .01$) (Table 6). A one-tail test of probability was used in testing the differences in both the supervisor and supervisee I/R ratio as the direction

of change was predicted *a priori*.

Table 5 I/R Supervisor
Independent Samples t-test: Pooled Variance Estimate

t Value	Degrees of Freedom	1-Tail Prob.
-1.43	16	.086

Group Description

Group	N	Mean	Std. Dev.	Std. Error
Control	10	.600	.235	.074
Exp.	8	.446	.217	.077

Table 6 I/R Supervisee
Independent Samples t-test: Pooled Variance Estimate

t Value	Degrees of Freedom	1-Tail Prob.
2.58	16	.01

Group Description

Group	N	Mean	Std. Dev.	Std. Error
Control	10	.256	.251	.073
Exp.	8	.549	.230	.089

Correlational Analysis

Correlational analyses with supervisee experience variables as predictors and supervisor and supervisee critical ratios as criterion variables were calculated with the Pearson product moment correlation coefficient for interval level data. Although it is unusual to correlate measures from one subject with measures of another, the critical ratios were obtained through the interaction between supervisor and supervisee and could logically be related in a correlational design.

Control group. With degrees of freedom equal to 8, an r greater than or equal to .632 was required for significance at a probability level of .05. In the control group a moderate inverse relationship was noted between the number of clinical treatment hours acquired by the supervisee and the supervisee D/P ratio ($r = -.667$, $p < .05$). A moderate inverse relationship was also noted between number of weeks in the placement and the supervisee C/S ratio ($r = -.765$, $p < .05$). Another moderate inverse relationship was found between the supervisee C/S ratio and the supervisee D/P ratio ($r = -.66$, $p < .05$). A strong and significant relationship was found between the supervisor C/S ratio and the supervisee C/S ratio ($r = .81$, $p < .05$) and a moderate relationship was found between the supervisor and supervisee D/P ratios ($r = .700$, $p < .05$) (Table 7).

Table 7 Correlation Matrix - Control group

	see age	prev exp	# cc hrs	wks in	hrs in	I/R sor	A/E sor	C/S sor	D/P sor	I/R see	A/E see	C/S see	D/P see	total
I/R sor	.185	.211	-.332	-.18	-.129	1								
A/E sor	-.121	.078	-.425	.025	-.293	-.27	1							
C/S sor	.222	-.001	.101	-.535	-.115	.438	-.213	1						
D/P sor	-.492	-.15	-.392	.235	.161	.104	-.229	-.23	1					
I/R see	-.184	-.149	.168	-.439	-.125	-.118	.393	.486	-.64	1				
A/E see	-.024	.272	-.056	-.082	-.153	-.302	.617	.291	-.14	.496	1			
C/S see	.173	-.236	.319	-.765	-.381	.26	-.143	.81	-.424	.536	.073	1		
D/P see	-.418	.169	-.667	.442	.231	.368	.024	-.358	.7	-.446	-.175	-.667	1	
total mv	-.233	.136	.005	.671	.279	-.49	.359	-.729	.367	-.461	.091	-.63	.234	1

See age = Age of supervisee

Prev. Exp. = Amount of supervisee related work experience in months

#cc hours = Number of clinical treatment hours acquired prior to the placement

Wks in = Number of weeks between beginning of placement and date of audio-taped conference

Hrs in = Number of hours acquired between beginning of placement and date of audio-tape

Total moves = Total number of initiatory and reflexive moves for both supervisor and supervisee

Experimental Group. With degrees of freedom equal to 6, an r of .707 was required for a probability level of .05. Examination of the correlation matrix obtained for the experimental group (Table 8) revealed many significant relationships. Relationships between supervisee experience variables and conference content variables will be presented followed by relationships between conference content variables.

Number of weeks in the placement bore an inverse relationship of moderate strength to the supervisor A/E ratio ($r = -.708$, $p < .05$) and supervisee A/E ratio ($r = -.753$, $p < .05$). Weeks in the placement was moderately related to the supervisee D/P

ratio ($r = .713$, $p < .05$). Hours obtained by the supervisee since the beginning of the placement was inversely related to the supervisee A/E ratio ($r = -.752$, $p < .05$), and strongly related to the total C/S ratio ($r = .809$, $p < .05$).

In looking for relationships between conference content variables, the supervisor I/R ratio was found to have an inverse relationship of moderate strength with the supervisor C/S ratio ($r = -.788$, $p < .05$) and total C/S ratio ($r = -.734$, $p < .05$). The supervisor A/E ratio had a strong inverse relationship with the supervisor D/P ratio ($r = -.805$, $p < .05$) and an inverse relationship of moderate strength with the supervisee D/P ratio ($r = -.733$, $p < .05$) and supervisor C/S ratio ($r = -.762$, $p < .05$). An extremely strong relationship existed between the supervisor A/E ratio and supervisee A/E ratio ($r = .958$, $p < .05$). The supervisor C/S ratio was inversely related to the supervisee A/E ($r = -.767$, $p < .05$) ratio and positively related to the total C/S ratio ($r = .846$, $p < .05$). Relationships were found between the supervisor D/P ratios and the supervisee A/E ratio ($r = -.723$, $p < .05$), the supervisee D/P ratio ($r = .733$, $p < .05$) and total moves in the conference ($r = -.824$, $p < .05$). A strong inverse relationship was found between the supervisee I/R ratio and total moves in the conference ($r = -.793$, $p < .05$). Total moves were also related to the supervisee A/E ratio ($r = .707$, $p < .05$) and the supervisee D/P ratio ($r = -.853$, $p < .05$). Finally, an inverse relationship of moderate strength was found between the total C/S ratio and the supervisee A/E ratio ($r = -.743$, $p < .05$).

Table 8 Correlation Matrix - Experimental group

	see age	prv exp	# cc hrs	wks in	hrs in	I/R sor	A/E sor	C/S sor	D/P sor	I/R see	A/E see	C/S see	D/P see	C/S tl	tl mvs
I/R sor	-.02	-.402	-.508	-.096	-.389	1									
A/E sor	.497	-.249	-.405	-.708	-.679	.352	1								
C/S sor	-.258	.523	.693	.438	.666	-.788	-.762	1							
D/P sor	-.495	-.289	.203	.341	.617	.081	-.805	.364	1						
I/R see	-.28	.246	-.195	.649	.388	.096	-.437	.022	.367	1					
A/E see	-.425	-.434	-.406	-.753	-.752	.335	.958	-.767	-.723	-.541	1				
C/S see	.389	.096	-.203	-.061	.424	-.087	-.131	.105	.22	.465	-.314	1			
D/P see	-.568	-.091	-.061	.713	.274	.142	-.733	.164	.733	.653	-.628	-.099	1		
C/S total	-.119	.422	.489	.329	.809	-.734	-.693	.848	.416	.346	-.743	-.061	.713	1	
total mv	-.439	.065	.096	-.605	-.489	-.29	.694	-.112	-.824	-.793	.707	-.355	-.853	-.305	1

See age = Age of supervisee

Prev. Exp. = Amount of supervisee related work experience in months

cc hours = Number of clinical treatment hours acquired prior to the placement

Wks in plcmnt = Number of weeks between beginning of placement and date of audio-tape

Hrs in = Number of hours acquired between beginning of placement and date of audio-tape

Total moves = Total number of initiatory and reflexive moves for both supervisor and supervisee

ISCRS

Factor Analysis

Factor analysis procedures were applied to data from the ISCRS in four groups, (1) control group supervisors, (2) control group supervisees, (3) experimental group supervisors and (4) experimental group supervisees. Data from 20 supervisor/student clinician pairs were included in the factor analysis. The completed ISCRS for the two subject pairs whose audio-tapes were unintelligible were included. The factor analysis procedure used was the Principle Component Analysis with the

transformation method Orthotran/Varimax. The original extraction rule was to extract as many factors as required to account for 75% of the variance in the questionnaire items. This resulted in extraction of 4 factors for the supervisor experimental group and supervisee control group. Five factors were extracted for the remaining groups with this method. To maintain consistency, a four factor solution was imposed on the supervisor control group and the supervisee experimental group. The resulting four factors accounted for the following percentage of variance for the groups:

- (1) control group supervisors - 71.4%
- (2) experimental group supervisors - 77.4%
- (3) control group supervisees - 80.1%
- (4) experimental group supervisees - 71.5%

For all groups the oblique solution was used to determine the factors. This rotation provided the best simple structure. In the oblique solution the factors are correlated with each other, however intercorrelations were low with only one approaching the critical level of .5 suggesting the adequacy of the solution (Feldman, Gagnon, Hofmann & Simpson, 1988). For all groups the factor representing Perceived Indirect Supervisory Behavior was identified. Some other factors were also interpretable but several eluded interpretation. The oblique solution primary pattern matrices and communalities for each variable are presented for each group (Tables 9 - 16). The communality estimate represents the amount of variance for that questionnaire item which can be accounted for by the four factors. Tatsuoka (1976) recommended omitting any items with a communality estimate below .3. This cut-off

point did not require the exclusion of any items.

Table 9 Supervisor Control Group
Oblique Solution Primary Pattern Matrix - Orthotran/Varimax

Item	Factor 1 (Indirect)	Factor 2 (Direct)	Factor 3 (?)	Factor 4 (?)	Communality
1	-.308	-.801*	-.056	.423	.919
2	.636*	.426	-.215	.122	.648
3	.368	.114	.613*	.606	.891
4	.149	.835*	-.243	.054	.782
5	.721*	.252	-.128	.169	.629
6	-.221	-.767*	-.016	-.011	.638
7	.054	.907*	.053	.07	.833
8	.146	-.461	.59*	.275	.658
9	.608*	-.244	.242	-.275	.563
10	.798*	.209	.028	.074	.687
11	.008	.092	-.059	-.984*	.979
12	.606*	.301	-.133	-.085	.483
13	.675*	-.282	.475	-.355	.887
14	-.045	-.093	.86*	-.253	.814
15	-.188	.124	.583*	.282	.47
16	.662*	-.194	-.458	.343	.804
17	.373	.195	-.516*	-.065	.447

Note. $N = 10$

* = highest loading

Table 10 Supervisor Control Group Data
Primary Intercorrelations

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1			
Factor 2	-.468	1		
Factor 3	-.426	.088	1	
Factor 4	-.171	-.078	-.09	1

Table 11 Supervisor Experimental Group
Oblique Solution Primary Pattern Matrix - Orthotran/Varimax

Item	Factor 1 (Indirect)	Factor 2 (?)	Factor 3 (?)	Factor 4 (?)	Communality
1	.153	-.017	-.576*	.126	.451
2	.647*	.68	.182	-.006	.933
3	-.882*	.013	-.246	.284	.888
4	-.524	-.149	.097	.743*	.917
5	.805*	.145	-.241	.197	.828
6	.164	.671	.429	.726*	.866
7	.328	.024	-.843*	-.464	.932
8	-.061	-.025	-.004	-.859*	.726
9	.292	-.809*	.282	.079	.701
10	.85*	.061	-.113	.003	.774
11	.187	-.377	.988*	.002	.904
12	.033	-.233	-.229	-.888*	.706
13	-.18	-.802*	.45	.257	.85
14	.035	.755*	-.026	.478	.614
15	.003	-.044	.742*	.533	.611
16	-.589*	.463	.019	.309	.600
17	.895*	-.029	-.089	.037	.843

Note. $N = 10$

* = highest loading

Table 12 Supervisor Experimental Group Data
Primary Intercorrelations

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1			
Factor 2	.004	1		
Factor 3	-.196	.236	1	
Factor 4	-.037	-.256	-.28	1

Table 13 **Supervisee Control Group**
Oblique Solution Primary Pattern Matrix - Orthotran/Varimax

Item	Factor 1 (Active Supervisor)	Factor 2 (Indirect)	Factor 3 (Direct- Evaluative)	Factor 4 (Conference Organization)	Communality
1	-.1	-.459	.698*	.38	.854
2	.507	.845*	.007	-.004	.974
3	.01	.003	-.26	.868*	.841
4	.899*	-.022	.294	.118	.909
5	.244	.695*	-.455	-.287	.848
6	.272	-.847*	-.173	.001	.834
7	.713*	.629	-.043	.024	.91
8	.579*	-.033	-.244	-.237	.426
9	.416	.713*	-.506	-.055	.938
10	-.003	.621*	-.392	.539	.74
11	.638*	.038	-.293	-.205	.576
12	-.337	-.001	.905*	.131	.955
13	.058	.019	.844*	-.17	.752
14	.287	-.075	-.286	-.722*	.62
15	-.413	-.398	.589*	-.259	.755
16	.738*	.234	-.366	.08	.767
17	.143	-.522	.067	.715*	.925

Note. $N = 10$

* = highest loading

Table 14 **Supervisee Control Group Data**
Primary Intercorrelations

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1			
Factor 2	.003	1		
Factor 3	-.039	.034	1	
Factor 4	.113	-.134	-.04	1

Table 15 **Supervisee Experimental Group**
Oblique Solution Primary Pattern Matrix - Orthotran/Varimax

Item	Factor 1 (Indirect)	Factor 2 (Direct)	Factor 3 (Passive Clinician)	Factor 4 (?)	Communality
1	.46	.564*	-.036	-.277	.333
2	.378	-.49*	-.207	.076	.438
3	-.036	-.002	.227	.912*	.857
4	.339	.039	.695*	-.09	.684
5	.071	.065	.032	.865*	.826
6**					
7	.971*	-.055	-.162	.06	.955
8	.135	.824*	-.173	.094	.774
9	.887*	.273	.046	-.002	.779
10	.724*	-.088	.227	.348	.947
11	.727	-.382	-.313	-.178	.736
12	.008	-.343	.799*	-.019	.844
13	.761*	.508	.439	-.703	.934
14	-.002	.688*	.425	-.005	.567
15	-.282	-.008	.599*	.443	.474
16	-.25	.559*	-.164	.222	.592
17	.332	-.163	-.834*	-.216	.707

Note. $N = 10$

* = highest loading

** Item 6 was omitted from analysis because there was no variance for that item. All subjects scored identically.

Table 16 **Supervisee Experimental Group Data**
Primary Intercorrelations

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1			
Factor 2	-.203	1		
Factor 3	.234	-.145	1	
Factor 4	.303	.289	-.009	1

Comparison of Group Means

Questions 6 and 7 required the comparison of the mean Perceived Indirect Supervisory Behavior measure across conditions for both supervisees and supervisors. A factor labelled as "indirect" was established during factor analysis for each condition for both supervisees and supervisors. As expected, the variables loading on the "indirect" factor differed across subjects and conditions. In order to make a valid comparison of group means, only those items which loaded on the "indirect" factor in both conditions were selected. Thus the items used in calculating the mean Indirect Supervisory Behavior measure for **supervisors** were items 2, 5 and 10. Correspondingly, the items used in calculating the mean Perceived Indirect Supervisory Behavior measure for **supervisees** were items 2, 9 and 10.

Results of the Mann-Whitney U-test comparing the mean supervisor Perceived Indirect Supervisory Behavior in the control group with the mean supervisor Perceived Indirect Supervisory Behavior in the experimental group found no differences ($U=47$, $p=.8166$) (Table 17). Results of the Mann-Whitney U-test comparing the mean supervisee Perceived Indirect Supervisory Behavior in the control group with the mean supervisee Perceived Indirect Supervisory Behavior in the experimental group found no differences ($U=45$, $p=.6994$) (Table 18).

Table 17 Supervisor Perceived Indirect Supervisory Behavior
Mann-Whitney U-test

Group	N	Σ Rank	Mean Rank
Control	10	108	10.8
Experimental	10	102	10.2
U		47	
U-Prime		53	
Z		-.227	p = .8206
Z corrected for ties		-.232	p = .8166
# tied groups		5	

Table 18 Supervisee Perceived Indirect Supervisory Behavior
Mann-Whitney U-test

Group	N	Σ Rank	Mean Rank
Control	10	100	10
Experimental	10	110	11
U		45	
U-Prime		55	
Z		-.378	p = .7055
Z corrected for ties		-.386	p = .6994
# tied groups		4	

CHAPTER 5

DISCUSSION

Two aspects of the supervisory conference will be covered in this discussion. First, content of the conference in the experimental and control group will be presented. Data for this section were derived from the MOSAICS. This information will include description of the conference, evidence of active supervisee involvement in the conference, evidence of differential supervision and evidence of supervisee self-analysis. Second, perceptions of the "indirectness" of supervisory behavior by the conference participants will be discussed. Data for this section were derived from the ISCRS.

Description of Conference Content

Discussion of conference content will focus on the implications of conference behaviors in the framework of the Colleagueship supervision model of Anderson (1988).

Control Group

Inspection of descriptive statistics for the critical ratios obtained from the control group revealed a conference much like that described in previous research (Caracciolo, Rigrodsky & Morrison, 1978; Culatta & Seltzer, 1976; Dowling & Witkopp, 1982; Hatten, 1966; Roberts & Smith, 1982; Smith & Anderson, 1982a; Tufts, 1984; Underwood, 1973). Supervisors initiated conference topics 30% more often than supervisees. The supervisor initiatory/reflexive (I/R) ratio was .55

indicating that they were equally initiatory and reflexive. In contrast the supervisee I/R ratio was .244 supporting previous reports of a passive supervisee role in the conference. The I/R ratios for both supervisors and supervisees were compared across conditions and will be discussed further in a later section.

The remaining critical ratios did not differ substantially between the participants, indicating that the supervisor set the content and direction of the conference through initiatory moves and the supervisee followed the supervisor lead. The conference was more simple than complex ($C/S \text{ sor} = .422$, $C/S \text{ see} = .354$). This indicates that supervisors and supervisees often did not provide explanations or justifications for their suggestions, evaluations and opinions. Fact stating occurred more often than discussion which ties one event to another or draws comparisons and causal relationships between events. This cannot be seen as positive in the Colleagueship model of supervision. Even minimally competent students, who are not ready to spontaneously engage in complex discussion, need to have such critical thinking and problem solving skills modelled for them by their clinical supervisors. Limited levels of complex discussion were also found by Roberts and Smith (1982).

The conference was more analytic than evaluative ($A/E \text{ sor} = .743$, $A/E \text{ see} = .857$). Both supervisors and supervisees tended to present facts, explanations and suggestions rather than evaluations and opinions. This initially seems to be a positive indicator. A high supervisor A/E ratio indicates a conference in which the supervisor presents information but does not directly provide evaluation. This seems consistent with the desires of the Colleagueship model of supervision (Anderson, 1988). The

model, however emphasizes *analysis* followed by *integration* in which conclusions, generalizations and evaluations are made. Ideally the supervisee will participate in the evaluative discussion during *integration*. The supervisee A/E ratio was also high however. Thus discussion in the control group conference was strikingly without evaluative comments from either participant. Perhaps little evaluative discussion is required to assess the effectiveness of treatment plans and treatment methods. Minimal levels of evaluative behavior have been found in previous studies of supervisory conference content (Culatta & Seltzer, 1976, 1977; Roberts & Smith, 1982).

The conference was substantially more diagnostic than prescriptive (D/P sor = .847, D/P see = .877). Both supervisors and supervisees tended to focus on discussion of previous events rather than planning for future ones. Discussion of facts and explanations dominated with few suggestions from either party. The ideal of Collegueship supervision would have the student clinician engage in self-analysis and then plan for future sessions. Neither the student nor the supervisor engaged in the projective portion of analysis. It may be that supervisees were hesitant to make such projective statements for fear of being judged and supervisors avoided the same statements to prevent 'directing' the student. In any case it appeared that little joint planning occurred in the conference. A reduced amount of prescriptive moves was also found by Roberts and Smith (1982).

In summary, supervisors and supervisees were distinguished in the conference by initiatory moves. The supervisor took an active role by initiating discussion and

determining conference content. The supervisee was primarily a passive participant who responded and reacted to the supervisor. Fact stating was the predominant utterance type for the supervisee. The conference was primarily simple, analytical and diagnostic. This general description replicates the study of conference content by Roberts and Smith (1982).

Experimental Group

Inspection of descriptive statistics for the critical ratios obtained from the experimental group revealed a conference with significant differences from that described in previous research (Caracciolo, Rigrodsky & Morrison, 1978; Culatta & Seltzer, 1976; Dowling & Witkopp, 1982; Hatten, 1966; Roberts & Smith, 1982; Smith & Anderson, 1982a; Tufts, 1984; Underwood, 1973). In the experimental group, supervisees initiated conference topics almost 10% more often than supervisors. Both the supervisor and supervisee were approximately equally initiatory and reflexive ($I/R \text{ sor} = .422$, $I/R \text{ see} = .507$). The I/R ratios for both supervisors and supervisees were compared across conditions and will be discussed further in a later section.

Just as in the control group, the remaining critical ratios did not differ substantially between the participants. Because of the similarity in the I/R ratios however, it can be inferred that both the supervisor and supervisee determined content and tone of the conference. The conference in the experimental group was equally complex and simple ($C/S \text{ sor} = .463$, $C/S \text{ see} = .569$). In particular, the complex conversation by the supervisee compared favorably with that obtained in the control

group. In the experimental group, supervisees engaged in more explanations of facts and suggestions, and more justifications for evaluations and opinions than in the control group. This finding is clearly desirable in the framework of Colleagueship supervision.

As in the control group, the conference was more analytic than evaluative (A/E sor = .691, A/E see = .821). Again, both supervisors and supervisees tended to present facts, explanations and suggestions rather than evaluations and opinions.

The experimental group conference was more diagnostic than prescriptive (D/P sor = .641, D/P see = .752), although perhaps less strongly one-sided than in the control group.

In comparing the conference behaviors of the control group with those of the experimental group, several differences are noted. Upon visual comparison, the supervisee initiatory/reflexive ratio and supervisee complex/simple ratio are higher in the experimental group. Both of these trends are positive when viewed from the Colleagueship model of supervision. The conference in both conditions was more analytic than evaluative and more diagnostic than prescriptive.

Active Involvement

Questions 1 and 2 looked at effects of the supervisee-prepared agenda on active involvement in the conference for both supervisors and supervisees. The I/R ratio was used as a low-inference measure of active involvement. This study began with the hypotheses that student clinicians would be more initiatory (active) in conferences for which they had prepared an agenda than in conferences for which

they did not and that clinical supervisors would be less initiatory (active) in conferences with a supervisee-prepared agenda. Results indicated that supervisors were not significantly less initiatory in conferences with a supervisee prepared agenda, although this result approached significance. However, as predicted, a substantial and significant increase in supervisee initiations was noted. It is interesting to note that change was seen in supervisee initiatory behavior without significantly affecting the initiatory behavior of supervisors. In fact, the I/R ratio for the two parties in the experimental group were very close. This result seems consistent with the desire for supervisee and supervisor to establish a collaborative, collegial relationship.

It appears that introduction of the supervisee-prepared agenda was successful in increasing the active involvement of the supervisee in the conference. As emphasized previously, this is a common goal of the supervision models in speech pathology (Anderson, 1988; Caracciolo, Rigrodsky & Morrison, 1978; Farmer & Farmer, 1989; Oratio, 1977). However increased involvement is not a sufficient indicator of positive change in the conference. The aspects of differential supervision and increased self-analysis must also be considered.

Differential Supervision

Correlational analysis was used to look for evidence of differential supervision in the control and experimental groups. Supervisee experience variables of age, previous related work experience, number of clinical treatment hours, weeks in placement, and hours acquired since the beginning of the placement were correlated

with conference content variables in this analysis.

Control Group

Question 3 pertained to differential supervision in the control group. An inverse relationship of moderate strength was found between the number of clinical treatment hours acquired by the supervisee and the supervisee D/P ratio. Thus the more clinical experience the student brought to the placement the less diagnostic (and more prescriptive) the conversational moves of the supervisee. This may indicate that more experienced student clinicians are able to make sense of the events of therapy with less discussion, thereby affording more time and conversational moves to projective discussion. This would be a positive outcome in the framework of differential supervision.

The only other significant relationship between supervisee experience variables and conference content was a moderate inverse relationship between number of weeks in the placement and the supervisee C/S ratio. This relationship is evidence of differential supervision but in the direction contrary to that suggested by theory. Apparently, as students moved forward in their placements, their conversation became less complex. Differential supervision should provide and encourage increased complexity as students gain experience in their clinical practicum.

The search for evidence of differential supervision in the traditional supervisory conference yielded little new information. An increase in supervisee prescriptive moves is tentative evidence of differential behavior. The decrease in complex moves by the supervisee as time in the placement increased is surprising.

The general lack of significant correlations speaks to the need to encourage differential supervision in response to the experience levels and abilities of each individual supervisee.

Experimental Group

Question 4 related to differential supervision in the experimental group. Significant correlations were found for two supervisee experience variables, weeks in the placement and hours in the placement. As the length of time in the placement increased, the supervisor and supervisee A/E ratios decreased. In other words, conference content included more evaluations and opinions by both parties as the students gained experience in the placement. It must be remembered that conference content in the experimental group was highly analytic for both supervisors and supervisees. The correlation indicates merely that discussion is less dominated by analytic moves as the students gained experience within the placement. This is a positive indicator of differential supervision. In response to a variable of supervisee experience, time in the conference became more balanced between analyzing information and integrating that information into opinions and evaluations. Weeks in the placement was also related to the supervisee D/P ratio. With increased experience, supervisees were increasingly diagnostic and less prescriptive in their conversational moves. This appears logical in that the focus of 'what to do next' would be diminished as the placement continued, thereby allowing the student to focus on indepth analysis of the session and treatment plan.

Significant correlations were also found between number of hours acquired

since the beginning of the placement and conference content variables. The number of hours obtained by the supervisee within the placement was inversely related to the supervisee A/E ratio. This is explained by the inevitable association of increased weeks in the placement and increased hours and does not reveal any new relationships. The number of hours in the placement was also strongly related to the total C/S ratio. This positive relationship revealed that as supervisee experience increased, so did the overall complexity of conference content. This is clearly a desired expression of differential supervision. The conference reflected the supervisees' increasing knowledge and ability with increased conversational complexity.

For both the experimental and control groups, the only supervisee experience variables which were related to conference content were those that described experience **within** the placement. Other variables such as total number of acquired clinical treatment hours, previous related work experience and supervisee age did not show correlations with conference variables. It appears that experience specific to the practicum site, client base and particular supervisor are the influential variables in differential supervision.

Supervisee Self-Analysis

Correlational analysis was also used to look for evidence of supervisee self-analysis in the control and experimental groups. The supervisee and supervisor I/R ratios were correlated with the other conference content variables in this analysis.

Control Group

In the control group, no significant correlations were found between the supervisor or supervisee I/R ratio and other conference variables. The correlations between conference variables that were revealed were reflections of the parity between the supervisee and supervisor critical ratios for all but the I/R ratio. Thus there was a significant positive relationship between the supervisee and supervisor C/S, A/E, and D/P ratios.

Experimental Group

The supervisor I/R ratio was inversely related to the supervisor C/S ratio and the total C/S ratio. Although this result is difficult to interpret as an indicator of increased supervisee self-analysis, it is interesting. This result suggested that as the supervisor increased initiatory, directive behavior, the complexity of supervisory utterances decreases. Roberts and Smith (1982) suggested that supervisors may gravitate towards less complex utterances because of the perception that complex conversation is more time consuming.

The supervisee I/R ratio was inversely related to total moves. This indicates that the participants spent more time in their conversational moves. It is possible that increased time in conversational moves was a reflection of increased analysis. This could be seen only as very tentative and indirect evidence of increased self-analysis, however.

No insights into supervisee self-analytical behavior were available through the correlational analysis. However, in reviewing the descriptive data from the critical ratios, a much higher rate of complex utterances by the supervisee was noted in the

experimental group as compared to the control group. Such an increase reflects the ability of the supervisee to relate observations, evaluations, suggestions and opinions to other factors and elements and may be evidence of increased self-analysis in the experimental group.

Conference Perception

Data from the ISCRS were used to investigate supervisee and supervisor perceptions of the conference. In particular, perceptions of indirect supervisory behavior were of interest. Factor analysis procedures were used to confirm those variables related to indirect supervisory behaviors for both supervisor and supervisee. Perceived Indirect Supervisory Behavior was compared across conditions for supervisees and supervisors.

As described in Chapter 3 (Methodology) in the section on data analysis, factor analysis procedures were applied separately to the supervisor and supervisee and separately to the two conditions resulting in the following four groups of factor analysis results:

- (1) Control group supervisor,
- (2) Control group supervisee,
- (3) Experimental group supervisor, and
- (4) Experimental group supervisee.

Items from the ISCRS which loaded on the indirect factor were compared across conditions. Items which loaded on this factor for both the control and experimental conditions for the supervisors were included in calculations of mean Perceived

Indirect Supervisory Behavior. For supervisors these items were:

- Item 2. The supervisor provides justification for statements or suggestions,
- Item 5. The supervisor uses the clinician's ideas in discussion during the conference, and
- Item 10. The supervisor helps the clinician set realistic goals for the clients.

For supervisees, the items included in calculating Perceived Indirect Supervisory Behavior were:

- Item 2. The supervisor provides justification for statements or suggestions,
- Item 9. The supervisor uses a supportive style, and
- Item 10. The supervisor helps the clinician set realistic goals for the clients.

Review of the previous studies using this tool, indicated that these four items loaded consistently on the "indirect" factor irrespective of who was rating the conference.

In reviewing the items loading on the "indirect" factor, several interesting results were noted. In the supervisor control group, items 12 and 13 loaded on the "indirect" factor. These items seem to be necessarily associated with direct supervisory behavior. Yet supervisors in the control group score themselves similarly on these items as they do on items indicative of an indirect, collaborative supervisory interaction. It is possible that *self-perception* of these behaviors allows them to be

viewed as supportive. For supervisees in the control group, these behaviors were strongly loaded on the factor identified as "direct-evaluative". This difference in perceptions of the conference between supervisees and supervisors has been identified in previous studies (Blumberg, 1980; Smith & Anderson, 1982).

No differences were found in Perceived Indirect Supervisory Behavior across conditions for supervisors or supervisees. The mean amount of indirect behavior was extremely high in the control group which made measurement of differences difficult. It is interesting that supervisees and supervisors perceived the conference as highly indirect, when information from the critical ratios indicated a direct conference. The influence of the interpersonal relationship between supervisor and supervisee may affect perceptions of the conference (Carraciolo, Rigrodsky & Morrison, 1978; Martin, Goodyear & Newton, 1987).

CHAPTER 6

CONCLUSIONS

This study began with the hypothesis that use of a supervisee-prepared agenda would increase the active involvement of the supervisee in the supervisory conference. Furthermore, it was anticipated that an increase in supervisees' active involvement would increase the amount of differential supervisory behavior and the amount of supervisee self-analysis. An increase in differential supervision could be expected with increased supervisee involvement, because the supervisees would have increased opportunity to structure and solicit discussion which would reflect their knowledge and ability. Correspondingly, with increased initiations, supervisees would have more responsibility for explaining, interpreting and evaluating those aspects of their clinical work about which they initiated discussion. This would result in increased self-analysis. As mentioned previously, the desire for (1) active supervisee involvement in the supervisory conference, (2) differential supervision based on supervisee experience and ability and (3) supervisee self-analysis are the cornerstones of supervisory theory (Anderson, 1988; Caracciolo, Rigrodsky & Morrison; Farmer & Farmer, 1989; Oratio, 1977). This chapter will discuss the extent to which the hypotheses were supported by the results of this study. Limitations of the study and suggestions for future research will also be presented.

Active Involvement

Results of this study indicate that the agenda is effective in increasing active

involvement of the supervisee in the conference. Achieving an increase in supervisee initiations through a method as easily implemented and efficient as a supervisee prepared agenda is an important finding. The fact that a substantial change was noted in supervisee initiations without a significant change in supervisor initiations is interesting. This brings into question the practice of modifying supervisor behavior in the hopes of resultant changes in supervisee behavior. Although reduction of supervisor initiations has been suggested as a possible target in supervisory intervention (Roberts & Smith, 1982), it is important to note that no data exist to suggest that the amount of supervisor initiations in the conference is inappropriate or that modification of supervisor initiations will have any effect on supervisee behavior. Results of this study confirm that direct intervention with the supervisee is an appropriate strategy for encouraging positive change in conference interaction, at least in targeting increased supervisee involvement.

By what method does the agenda increase supervisee involvement in the conference? It certainly provides a framework for discussion and lists possible conference topics. It is also possible that it is effective in modifying the supervisees' perception of their role in a supervisory interaction. Previous research with the agenda in a peer supervisory interaction suggested that the agenda 'legitimized' an active role in the conference, a role student clinicians are unaccustomed to assuming. This same process may be at work in the traditional supervisory interaction. Egan (1975) and Pickering (1977) have written on the difficulty supervisors may experience in encouraging participatory behaviors in students who have been trained by years of

schooling to take a passive role. The agenda may be a structured method of manipulating this passive role perception.

Differential Supervision

There was little evidence of differential supervision in the control group. Of the two significant correlations, one was in the direction contrary to that suggested by theory. A decrease in complex moves as length of time in the placement increases is not what would be desired in a continuum view of supervisory interaction (Anderson, 1988). However, these results are not necessarily causal in nature. It is possible that the decrease in complexity was causally related to another variable not measured in this study.

Evidence of differential supervision was much more apparent in the experimental group. This is a positive indicator of the effect of agenda use in the supervisory conference. A most encouraging finding was the relationship between supervisee experience in the form of hours in the placement and the complexity of the conference. This relationship is opposite to that found in the control group. An increase in complexity with increasing experience is the essence of the continuum perspective of supervisory interaction (Anderson, 1988).

It was interesting that the variables correlated with evidence of differential supervision in the experimental group were those that related to experience within the placement and not those that related to experience outside the practicum. This would be consistent with a continuum view of supervision in which the student can move back on the continuum with new clients or practicum settings. This finding should be

considered in other studies which investigate differential supervision.

Supervisee Self-Analysis

Results of the correlational analysis revealed little information pertaining to supervisee self-analysis. One area that may afford insight into the degree of supervisee self-analysis is the Complex/Simple (C/S) ratio. This comparison was not posed *a priori*, but a change in the supervisee C/S ratio became apparent when reviewing the descriptive statistics. The higher level of complexity measured by this ratio indicates the supervisee related facts or events to other events or generalizations. Complex moves provide justification for opinions, evaluations and suggestions. An increase in such behavior is surely evidence of increased self-analysis.

Conference Perceptions

Results of the factor analysis and subsequent comparison of indirect supervisory behavior across conditions yielded little information about the perceptions of supervisors and supervisees. It could be tentatively concluded that both parties perceived the conference to be highly indirect in both conditions. An interesting finding was that some questionnaire items loaded on different factors dependent on who rated the conference. Some items viewed as direct-evaluative by supervisees were seen as indirect by supervisors. Although an indirect supervisory factor was identified for all groups, many other factors eluded interpretation. This may be due to the small data set available for the factor analysis. This will be discussed further under Limitations of the Study.

Perhaps a qualitative research approach would yield more information about

the change in participants' view of the conference. Pickering (1977) acquired a wealth of descriptive information on the conference with this approach. A qualitative focus may be successful in documenting changes in perception that this method did not. Given that there was a dramatic change in the most obvious of conference interactions, the level of involvement of the participants, and that this change may include modification of role expectations, it is probable that perceptions have been affected.

Limitations of the Study

This study attempted to measure the effect of supervisee agenda on supervisory conference content. A discussion of internal validity will assess whether manipulation of the independent variable was responsible for the differences seen. A discussion of external validity will assess the generality of the results.

Threats to Internal Validity

Internal validity can be affected by history, maturation and test-practice effects (Ventry & Schiavetti, 1986). These factors were not applicable in this study because they are limited to multiple measures of the dependent variable for each subject. In this study, only one measure was obtained for each variable for each subject.

Instrumentation was a possible threat to internal validity. For the MOSAICS, reliability and validity were established by Smith and Anderson (1982b). In addition, Hagler and Fahey (1986) established the validity of using this system for analyzing short segments of conference interaction. Interjudge and intrajudge reliability measures for the MOSAICS were moderate, however, indicating a threat to internal

validity. Reliability and validity for the ISCRS were established by Smith and Anderson (1982a). Results from this study and from previous application of the ISCRS show that different items load on different factors depending on who is rating the conference. This brings into question the validity of participants' perceptions. Continued exploration of this tool is recommended.

Differential selection of subjects is another factor which can compromise internal validity (Ventry & Schiavetti, 1986). For this study assignment to group was random. Furthermore supervisees and supervisors were compared across groups on the basis of all the demographic variables obtained. No significant differences between the groups were found. Subject mortality was evident in this study. Of the twenty-three student/supervisor pairs who agreed to participate, three pairs did not complete the requirements of the project. In two cases this was reportedly due to illness of the supervisor, a factor which would seem to be chance, and not evidence of an internal difference in the subjects. The cause of mortality of the remaining subject pair was not known.

The Hawthorne effect was included by Ventry and Schiavetti (1986) as a possible threat to internal validity. The Hawthorne effect refers to changes in subject behavior that occur because the subjects know that they are participating in a research study (Ventry & Schiavetti, 1986). This effect was likely present in this study, particularly due to the requirement of audio-taping the conference. Its effect should be comparable across the two conditions, however, as there was no increased contact or attention for either group. Therefore the Hawthorne effect would have

compromised only the descriptive portion of the study. It would not have resulted in artificial differences between groups.

The final threat to internal validity outlined by Ventry and Schiavetti (1986) deals with the potential interaction of the previously mentioned factors. No interaction between instrumentation and the Hawthorne effect are suspected.

In summary, this study had minimal threats to internal validity. Assignment to group was random, each subject was measured on only one occasion and reliability and validity for the instrumentation had been established. The one factor of concern was the modest intrajudge and interjudge reliability for the MOSAICS scale, however the level of reliability compared favorably with those previously reported by Roberts and Smith (1982) and Smith and Anderson (1982b).

Threats to External Validity

The first threat to external validity described by Ventry and Schiavetti (1986) was subject selection. This factor deals with the extent to which the subjects participating in the study are representative of the group to which generalizations are made. Student/supervisor pairs were selected on the basis of their independent, mutual agreement to participate. This stringent selection procedure undoubtedly led to a subject population interested in research in general and in supervisory research in particular. Also of concern is the relatively small number of subjects in the sample. On the positive side, review of the subject demographic data revealed breadth in the sample. Supervisors had a wide range of experience, both as clinicians and as supervisors, and worked in a variety of settings. Student clinicians were from

graduate and undergraduate programs and had a wide range of previous clinical experience. A total of eight university programs across the United States and Canada were sampled in this study. The method of subject selection and size of the sample, while threats to external validity, could not be minimized within the scope of this study.

The second threat to external validity described by Ventry and Schiavetti (1986) was reactive effects of pretesting. The effects of pretesting are not germane in this study because no pretest was given.

The third threat to external validity presented by Ventry and Schiavetti (1986) is reactive arrangements. This factor deals with the extent to which any effects on the dependent variable are limited to the specific setting of the study. This factor is of concern with use of the agenda. At most, it can be concluded that use of the agenda will have a positive effect on supervisees' initiatory behavior in a conference where its use is required and only on the occasion of second use. Effects of the agenda where its use is suggested or effects of the agenda after multiple uses cannot be inferred from this study.

The final threat to external validity presented by Ventry and Schiavetti (1986) is that of multiple treatment interference. As there was only one intervention, the agenda, this threat is not germane to this study.

A review of threats to external validity has revealed that the depth of subject selection as well as the selection process itself compromise external validity. Generalization of results to all student clinician/supervisor pairs must be made

tentatively. In addition, statements of the effects of the agenda must be cautiously worded. While the agenda appears to have potential as a catalyst for positive change in the supervisory conference its effects must be investigated further.

An additional limitation to this study deals with interpretation of the results of the factor analysis applied to data from the ISCRS. The factor analysis was conducted with data from 10 subjects in each group. There are 17 items on the ISCRS. Tatsuoka (1971) and Norman and Streiner (1986) recommend that 10 subjects exist for each item included in a factor analysis. Thus 170 subjects would be required in each condition to complete a statistically valid factor analysis. It is obvious that to satisfy this condition is quite beyond the scope of most studies in speech-language pathology. In fact, the study by Smith and Anderson (1982a) which provided reliability and validity for the ISCRS used only 45 subjects in the factor analysis. The inappropriateness of completing a factor analysis in this instance is minimized by the fact that the factor analysis was used not to explore data or an instrument but to confirm variables revealed in previous research found to load on an indirect supervisory behavior factor. The items used in calculating the mean Perceived Indirect Supervisory Behavior for supervisees (items 2, 9 and 10) and supervisors (items 2, 5, and 10) were in fact items which loaded on the indirect factor in both the Smith and Anderson (1982a) investigation and the investigation by Brasseur and Anderson (1983). Still, the results of the factor analysis must be viewed with caution. Although no difference in perception of the conference was found, it cannot be concluded that one did not exist.

Implications for Future Research

This study leads to some additional questions that may be answered in future research. The effects of the agenda could be investigated more completely. In this study agenda use was required on only two occasions. It would be interesting to discover if the agenda would be used on a voluntary basis over many sessions and then assess its ongoing effect on conference interaction. If increased supervisee involvement were seen over multiple uses of the agenda, the continuation of such active involvement after removal of the agenda could be investigated.

This study focused entirely on interaction in the conference. Missing from this project is an indication of any second or third order effects. The second order effect would measure the effects of change in conference interaction on supervisee learning or supervisee independence. It seems necessary to first find evidence of the ability to modify conference interaction and next experimentally test the effects on clinician learning and independence. This study provided that first step. Third order effects would measure the effects of supervisee learning or independence on measures of learning in the client. These areas of research would provide additional information on which to assess the appropriateness of the currently accepted models of the supervisory process.

Early results are encouraging. The agenda appears to be an easily implemented, theoretically sound, efficient device for changing one of the most salient aspects of the conference, that is, which party determines the content. Positive changes suggestive of differential supervision and increased self-analysis will allow

further study of the effects of such changes on supervisee independence, clinical ability and client improvement. Perhaps more importantly they would provide valuable insight into the dynamics of the complex relationship between a supervisor and student clinician.

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APPENDIX A
Smith Adapted MOSAICS Scale
Kathryn J. Smith

In Anderson, J. (1988). The supervisory process in speech-language pathology and audiology. Boston, MA: College-Hill Press.

SUMMARY OF MOSAICS SCORING

Speaker

S: Supervisor

C: Clinician

Pedagogical Moves

STR: Structuring, launching or halting move that directs the flow of discussion.

SOL: Soliciting, asking for a physical or verbal response.

RES: Responding, answering or fulfilling the expectation of a solicitation.

REA: Reacting, amplifying, qualifying, or making an unsolicited reaction.

RSM: Summary reaction to more than one move or a genuine summary or review.

Substantive Areas (Content Analysis)

Instructional

Generality

S: Specific, pertinent to the specific client being discussed.

G: General, pertinent to generalized objectives, methods, theory or related fields.

Focus

O: Objectives and content to be taught.

M: Methods and materials, strategic and planned aspects of implementing objectives.

X: Execution, critical incidents, tactical and unexpected interactions.

Domain

C: Cognitive, pertaining to knowledge, learning, information, understanding.

A: Affective, pertaining to affective interactions-interest, motivation, attending.

D: Disciplinary and social interactions.

Related

SBJ:Content and subject matter to be learned by the clinician.

SPR:Supervision and clinician-training.

GRL:General topics related to speech pathology and audiology.

GNR:General topics NOT related to speech pathology and audiology.

Substantive-Logical Meanings (Logical Analysis)

Processes Relating to the Proposed Use of Language

DEF: Defining, definitions and verbal equivalents.

INT: Interpretations and rephrasings.

Diagnostic Processes

FAC: Fact stating, accounts, descriptions, or reports.

XPL: Explanations, reasons, or relationships.

EVL: Evaluations.

JUS: Justifications, reasons for evaluations.

Prescriptive Processes

SUG: Suggestions, alternative, and possible actions.

SGX: Explanations, reasons, and relationships for suggestions.

OPN: Opinions, directives of what should or ought to be done.

OPJ: Justifications for opinions, reasons, support, and criticisms.

From Smith, K. (1978). Identification of perceived effectiveness components in the individual supervisory conference in speech pathology and an evaluation of the relationship between ratings and content in the conference. (Doctoral dissertation, Indiana University, 1977). Dissertation Abstracts International, 39, 680B.

APPENDIX B
Rules For Scoring MOSAICS

General Rules

1. Listen to tape and score: speaker and first words.
2. Rewind tape, listen and score: instructional or related substantive areas and substantive-logical meanings.
3. As many as four passes through the tape are allowed.

Specific Rules*General Coding Instructions*

- A. Code from the viewpoint of an observer, with pedagogical meaning inferred from the speakers' verbal behaviors.
- B. Grammatical form may give a clue, but it is not decisive in coding. For example, SOL may be found in declarative, interrogative, or imperative form. Likewise, RES may be in the form of a question, indicating a tentative answer on the part of the speaker.
- C. Coding is done in the general context of the discussion. When two people are speaking at once, or when a person makes an interruption which is not acted upon (the interrupted party continues speaking on the original topic), the interruption is not counted and coding continues in the basic context.
- D. When one individual is making an extended pedagogical move which is periodically encouraged by grunts and statements such as "uh huh" and "go on", without actually changing discourse or pausing for longer than two seconds, these interruptions are not counted as separate pedagogical moves.

Pedagogical Moves

- A. STR moves form an implicit directive by launching discussion in specific directions and focusing on topics or procedures. The function of STR is either launching or halting-excluding, generally by the method of announcing or stating propositions. When a choice must be made between STR and REA, code STR for statements which move the discourse forward or bring it back on the track after a digression. For example, a new SUG or OPN is almost invariably found in a structuring move.
- B. In general, internal or parenthetical shifts of topic or emphasis are not separately coded unless they constitute a relatively permanent change in the discourse. The discourse is coded in the overall context.
- C. Checking statements (eg. "follow me?") are not coded as SOL within the context of another move unless some cue indicating a desired RES is present.
- D. Implicit in any SOL is the concept of knowing or not knowing. Therefore, code RES for any of the range of possible responses, including invalid ones and those indicating knowing or not knowing alone (eg., "I don't know").
- E. A SOL which calls for a fact is coded FAC, but if the RES gives both a fact and an explanation, the response is coded RES/XPL. In the same way, complex responses for solicitations of EVL, SUG, and OPN are coded as JUS, SGX, and OPJ.

- F. A speaker cannot respond to his or her own solicitation. An immediate self-answer to a question indicates that it was a rhetorical question, which is not coded SOL in the first place. If a speaker answers his or her own question after an intervening incorrect answer, the correction is coded as a reaction to the incorrect answer. If the speaker answers his or her own question after a pause, the answer is coded as a reaction to the absence of an expected response.
- G. When a reaction to a previous move is followed by a genuine summary reaction (RSM), both moves are scored for the same speaker.
- H. RSM frequently occurs when a unit of discussion is concluded by a speaker, who then turns to a new topic. The coder must determine when RSM ends and STR begins.
- I. A reaction to a solicitation occurs only when the reaction is about the solicitation and not a response to the SOL.
- J. A reaction may follow the absence of other reactions to a move such as STR. For example, a speaker may make a proposal and then react to the absence of any positive reactions for the other participants.

Substantive Areas

- A. Coding of Substantive Areas is in terms of the main context of discussion. However, in nondirective discussion shifts of substantive area are common. In order to code these shifts, which are an important aspect of supervision, the following rules are observed:
- B. Code Instruction Areas in preference to Related Areas if a conflict arises. For example, if it is difficult to determine whether discussion of subject content (e.g., language) is in the context of objectives for the clients (SOC) or in the context of the understanding of the content by the clinician (SBJ), code SOC in preference to SBJ.
- C. Code Instructional Domain (Cognitive, Affective or Disciplinary-social) first. This is the most general of the content dimensions, it tends to persist longest in the discourse, and it is the most difficult to code out of context. If a conflict arises in coding, code Cognitive in preference to Affective and Affective in preference to Disciplinary-social.
- D. Code Instructional Focus (Objectives and content, Methods and materials, Execution) second. Significant shifts in these areas occur more frequently than changes in Instructional Domain. If a conflict arises in coding, code Objectives in reference to Methods and Methods in preference for Execution.
- E. Code Instructional Generality (Specific or General) last. Moves commonly shift from Specific to General and back again. For a single move, code the area which occupies the most time or emphasis in the move, and code each move separately. If a conflict arises, code Specific in preference to General.
- F. Indicate the Substantive Area of each move even if it is not explicitly referred to.

Substantive-Logical Meanings

- A. Only when DEF or INT are the main focus of the discourse are they coded as such. They are not coded when they are in the immediate context of other Substantive-Logical Meanings.
- B. In a sequence of complex moves (XPL,SGX, OPJ, and JUS) always involve relationships between their simple analogues (FAC, SUG, OPN, and EVL) and other factors, such as generalizations, other simple moves, etc. In the analysis of therapy, particularly for objectives and methods, it is often difficult to determine when relationships are actually involved and when the move represents merely an extended description. As a general rule, these substantive-logical meanings are coded as complex whenever relationships are made to clients or specific therapy situations. In most other situations these moves are extended descriptions and are coded as simple moves.
- C. When more than one Substantive-Logical process occurs within a single pedagogical move and the overall context or emphasis is unclear, code according to the following order of priority; OPJ, JUS, SGX, XPL, OPN, EVL, SUG, FAC, INT, DEF. In effect, this means that complex is coded in preference to simple, prescriptive in preference to diagnostic.

From Smith, K. (1978). Identification of perceived effectiveness components in the individual supervisory conference in speech pathology and an evaluation of the relationship between ratings and content in the conference. (Doctoral dissertation, Indiana University, 1977). *Dissertation Abstracts International*, 39, 680B.

Score Sheet for Adapted MOSAICS

NAME _____ DATE _____ TIME _____ TO _____
Tape # _____ Tape Counter _____ to _____

[illegible]

APPENDIX D

MOSAICS Summary Sheet

Date _____ Name _____ MOSAICS SUMMARY SHEET Tape # _____

PEDAGOGICAL MOVES		FREQUENCY		TOTAL	
		SUPERVISOR	SUPERVISEE		
STRucturing					
SOLiciting					
RESponding					
REActing					
RSM(Summary reaction)					
Initiatory moves(I) STR+SOL					
Relaxive moves(R) RES+REA+RSM					
I/R Ratio I/I+R					
SUBSTANTIVE AREAS		SUPERVISOR		SUPERVISEE	
		Frequency	Percent	Frequency	Percent
GENERALITY	S (Specific)				
	G (General)				
FOCUS	O (Objectives)				
	M (Materials)				
	X (Execution)				
DOMAIN	C (Cognitive)				
	A (Affective)				
	D (Disciplinary)				
SUBSTANTIVE-LOGICAL MEANINGS					
LANGUAGE PROCESSES		DEF			
		INT			
DIAGNOSTIC PROCESSES		FAC			
		XPL			
		EVL			
		JUS			
PRESCRIPTIVE PROCESSES		SUG			
		SGX			
		OPN			
		OPJ			
CRITICAL RATIOS		SUPERVISOR		SUPERVISEE	
ANALYTIC (A) FAC+XPL+SUG+SGX					
EVALUATIVE (E) EVL+JUS+OPN+OPJ					
A/E RATIO A/A+E					
DIAGNOSTIC (D) FAC+XPL+EVL+JUS					
PRESCRIPTIVE (P) SUG+SGX+OPN+OPJ					
D/P RATIO D/D+P					
COMPLEX (C) XPL+JUS+SGX+OPJ					
SIMPLE (S) FAC+EVL+SUG+OPN					
C/S RATIO C/C+S					

APPENDIX E

ISCRS

Individual Supervisory Conference Rating Scale
(ISCRS)

Kathryn J. Smith

In Anderson, J. (1988). *The supervisory process in speech-language pathology and audiology*. Boston, MA: College Hill Press.

Name _____ Date _____
 Person Completing this Form (Circle one) Supervisor or Student Clinician
 Name of Supervisor or Student Clinician _____
 Please give your assessment of what happened in the conference just completed by rating the following items.
 Circle the number that best represents the level of occurrence of the activity suggested by each item. You can
 rate each item anywhere from one to seven.

	Definitely no			Neutral			Definitely yes
	1	2	3	4	5	6	7
1. The clinician is reluctant to ask questions.							
2. The supervisory provides justification for statements or suggestions.	1	2	3	4	5	6	7
3. The conference time is used to discuss ways to improve materials.	1	2	3	4	5	6	7
4. The supervisor offers suggestions on therapy techniques during the conference.	1	2	3	4	5	6	7
5. The supervisor uses the clinician's ideas in discussion during the conference.	1	2	3	4	5	6	7
6. The supervisor ignores problems presented by the clinician.	1	2	3	4	5	6	7
7. The conference time is used to provide feedback to the clinician about the clinical session.	1	2	3	4	5	6	7
8. Supervisors and clinicians participate in a teacher-student relationship.	1	2	3	4	5	6	7
9. The supervisor uses a supportive style.	1	2	3	4	5	6	7
10. The supervisor help the clinician set realistic goals for the clients.	1	2	3	4	5	6	7
11. The clinician verbalizes needs.	1	2	3	4	5	6	7
12. The conference time is used to discuss weaknesses in the clinician's clinical behavior.	1	2	3	4	5	6	7
13. The supervisor presents value judgments about the clinician's clinical behavior.	1	2	3	4	5	6	7
14. A written summary of the supervisor's observations is given to the clinician during the conference.	1	2	3	4	5	6	7
15. Supervisor and clinician participate in a superior-subordinate relationship.	1	2	3	4	5	6	7
16. The supervisor states the objectives of the conference.	1	2	3	4	5	6	7

APPENDIX F Conference Outline

(Adapted from Student initiated conference protocol,
Mawdsley, 1989)

The student will use this as a guideline to select topics for discussion with the supervisor during a scheduled conference and to aid in self-analysis of your own session. Check off items of interest, and summarize your evaluation of your clinical performance on that item as well as any questions or suggestions that come to mind. You may use the space to the right of the agenda items to record these reflections on the specific items of interest. Please refer to the completed outline attached as an example of use.

- I. Session Evaluation
(with supervisor data if available)
 - ___-interaction techniques-rapport
 - ___-instructions
 - ___-materials
 - ___-cueing
 - ___-modelling
 - ___-feedback -correct responses
 - ___-incorrect responses
 - ___-approximations
 - ___-response rate
 - ___-adaptability
 - ___-data collection
 - ___-behavior management
- II. Interpersonal Areas
 - ___-client motivation, interest, involvement, enjoyment
 - ___-clinician motivation, comfort level, enjoyment
- III. Client Progress
 - ___-graphs
 - ___-changes necessary in goals, materials, techniques?
- IV. Parent Training and Home Programs
- V. Supervisory Interaction
 - ___-questions regarding roles or expectations in the supervisory conference
- VI. Other

APPENDIX G

Conference Outline - Example of Use

(Adapted from Student initiated conference protocol,
Mawdsley, 1989)

The student will use this as a guideline to select topics for discussion with the supervisor during a scheduled conference and to aid in self-analysis of your own session. Check off items of interest, and summarize your evaluation of your clinical performance on that item as well as any questions or suggestions that come to mind. You may use the space to the right of the agenda items to record these reflections on the specific items of interest. Please refer to the completed outline attached as an example of use.

I. Session Evaluation

(with supervisor data if available)

- ☐ -interaction techniques-rapport
- ☒ -instructions *It seemed that responses were better when my instructions included a model.*
- ☐ -materials
- ☐ -cueing
- ☐ -modelling
- ☒ -feedback -correct responses *I'm not sure I'm giving explicit*
- ☐ -incorrect responses *cueing when he's wrong!*
- ☐ -approximations
- ☐ -response rate
- ☐ -adaptability
- ☐ -data collection
- ☒ -behavior management *I tend to coax, alternate strategies?*

II. Interpersonal Areas

- ☒ -client motivation, interest, involvement, enjoyment *-! want him to enjoy it more!*
- ☒ -clinician motivation, comfort level, enjoyment *-I am still very nervous!*

III. Client Progress

- ☐ -graphs
- ☐ -changes necessary in goals, materials, techniques?

IV. Parent Training and Home Programs

V. Supervisory Interaction

- ☒ -questions regarding roles or expectations in the supervisory conference *I'm feeling quite dependent. Is that O.K.?*

VI. Other

APPENDIX H
Letter Of Invitation For Clinical Coordinators

Dear (Clinical Coordinator),

We are writing to request your assistance in obtaining subjects for a research project in supervision. We would like to involve subjects from Canadian and American university training programs in speech-language pathology.

The project will investigate the effects of an organizational tool on supervisory conference content. We expect this research to further our understanding of the supervisory process. An abstract of the results will be forwarded to all cooperating individuals.

Participants will be student speech-language pathologists in clinical practica and their clinical supervisors. Practicum placements should fall in the period of January 1st, 1991 to April 30, 1991. Student clinicians can be undergraduate or graduate students. We would like to involve both inexperienced and experienced student clinicians. Clinical supervisors will be graduates of a recognized program in speech-language pathology and will have worked professionally for at least one year.

Participation would entail providing us with the number of eligible students involved in internal or external clinical practica through your university anytime during the January to April 1991 period. I would appreciate this information by December 30, 1990 or as soon as possible thereafter. We will provide an appropriate number of letters of invitation and informed consent documents to distribute to the students and supervisors eligible for participation. Those subjects wishing to participate will forward the signed consent documents to us and we will select student supervisor pairs based on their independent, mutual agreement to participate. This project has been approved by an ethics committee; a copy of the approval letter is available upon request.

A time commitment of 10 minutes is anticipated for clinical supervisors. The time commitment for student clinicians will be between 10 and 30 minutes.

If you have questions, please contact us at (403) 492-5314 or by fax at (403) 492-1626. Thank-you for considering this request. We look forward to hearing from you in the near future.

Sincerely,

Lu-Anne McFarlane
Graduate Student

Paul Hagler
Associate Professor & Director

APPENDIX I
Letter Of Invitation-Supervisor

Date

Dear Clinical Supervisor,

We are writing to invite your participation in a research project investigating components of the supervisory conference in speech pathology. Participants will be graduate and undergraduate student clinicians in speech-language pathology and their clinical supervisors. Additional information can be found in the enclosed Informed Consent document.

Participation in this study is expected to require approximately 10 minutes. Student and supervisor participation is voluntary and student-supervisor pairs will be selected on the basis of their independent, mutual agreement to participate.

Student clinicians in the experimental condition will be using an organizational tool designed to make certain supervisory activities, easier, less time consuming and more satisfying for both the supervisor and student clinician. When the project is completed, all participants will receive an abstract of our results.

To become a participant in this study, please sign and return one copy of the Informed Consent document in the envelope provided by February 25, 1991 or as soon as possible thereafter. The other copy is for your records. If your student also agrees to participate, we will forward an instruction package to you.

Please take a moment to send your consent today. Your participation will be greatly appreciated. Thank-you in advance.

Sincerely,

Lu-Anne McFarlane
Graduate Student

Paul Hagler
Associate Professor and Director

APPENDIX J
Letter Of Invitation-Supervisee

Dear Student Clinician,

We are writing to invite your participation in a research project investigating components of the supervisory conference in speech pathology. Participants will be graduate and undergraduate student clinicians in speech-language pathology and their clinical supervisors. Additional information can be found in the enclosed Informed Consent document.

Student and supervisor participation is voluntary and student-supervisor pairs will be selected on the basis of their independent, mutual agreement to participate.

Student clinicians in the experimental condition will be using an organizational tool designed to make certain supervisory activities, easier, less time consuming and more satisfying for both the supervisor and student clinician. Participation in the experimental condition is expected to take approximately 30 minutes. Those in the control group will have a time commitment of 10 minutes. When the project is completed, all participants will receive an abstract of our results.

To become a participant in this study, please sign and return one copy of the Informed Consent document in the envelope provided by February 25, 1991 or as soon as possible thereafter. The other copy is for your records. If your clinical supervisor also agrees to participate, we will forward an instruction package to your supervisor which will contain information for you.

Please take a moment to send your consent today. Your participation will be greatly appreciated. Thank-you in advance.

Sincerely,

Lu-Anne McFarlane
Graduate Student

Paul Hagler
Associate Professor and Director

APPENDIX K

Informed Consent: SUPERVISEE

Project Title: Supervisory Conference Content

Background information:

Name: _____

Address: _____

Age: _____

University Training Program: _____

Number of years of University Training: _____

University Program (Circle One): Graduate* Undergraduate

*If graduate - Nature of Undergraduate Degree

Arts _____ Education _____

Sciences _____ Speech Pathology _____

Other (Please Specify) _____

Practicum Site: _____

Supervisor Name: _____

Number of practicum hours acquired prior to this placement _____

Previous related teaching or clinical experience in months of full time equivalent

I understand that my participation is being requested in a research project investigating supervisor and supervisee interaction during conferencing. Participants will be speech-language pathologist supervisors and student clinicians. Assignment to control and experimental groups will be random.

If assigned to a control group, my participation will require me to provide an audio-tape of a supervisory conference taken at about the mid-term of the practicum placement and submit it to the investigator for analysis. In addition, I will complete a 17 item rating scale of the conference which was audio-taped. A time commitment of approximately 10 minutes is anticipated.

If assigned to an experimental group, my participation will require me to use a

conference organization tool in two consecutive supervisory conferences. I will audio-tape the second conference, timing use of the organizational tool to occur at approximately mid-term in the practicum placement. The time commitment as an experimental group subject to review the organizational tool, prepare it on two occasions and complete the rating scale is approximately 30 minutes.

Audio-tapes will be submitted for analysis and will be erased upon completion of the project.

I understand that assignment to groups is random and that any information provided will be used in a research project which will investigate conference components in speech-language pathology. My participation is voluntary, and I have the right to withdraw at any time without consequences. My name will be known only to the principal investigator.

To the best of my knowledge, the information I have provided is accurate, and I have retained a copy of this document.

Student Signature

Witness

Date: _____

Questions pertaining to this project may be directed to:

Lu-Anne McFarlane
Department of Speech Pathology and Audiology
University of Alberta
400 Garneau Professional Centre
11044-82 Avenue
Edmonton, AB. Canada T6G 0T2 Phone:(403) 492-5314

APPENDIX L

Informed Consent: SUPERVISOR

Project Title: Supervisory conference content

Background Information:

Name: _____

Address: _____

Practicum site: _____

Name of Student Clinician: _____

Number years worked as an S-LP: _____

Approximate number students supervised: _____

Previous coursework in supervision? _____

If yes, what type and how many?

inservice _____ university credit course _____

conference _____

I understand that my participation is being requested in a research project investigating supervisor and supervisee interaction during conferencing. Participants will be speech-language pathologist supervisors and their student clinicians. Assignment to control and experimental groups will be random.

If assigned to a control group, my student clinician will audio-tape a supervisory conference at approximately mid-term in the placement and submit it to the investigator for analysis. In addition, I agree to complete a 17 item rating scale after the audio-taped conference. The time commitment as a control group participant will be approximately 10 minutes.

If assigned to an experimental group, my student clinician will use an organizational tool in the supervisory conference. This tool will be used on two consecutive occasions, with the occasion of second use being audio-taped. The 17 item rating scale will be completed after the audio-taped conference, with a time commitment of approximately 10 minutes.

Audio-tapes will be erased upon completion of the project.

I understand assignment to group is random and that any information provided will be used in a research project which will investigate supervisory conference behaviors in speech-language pathology. My participation is voluntary, and I have the right to withdraw at any time without consequences. My name will be known only to the principal investigator.

To the best of my knowledge, the information I have provided is accurate, and I have retained a copy of this document.

Supervisor Signature

Witness

Date: _____

Questions pertaining to this project may be directed to:

Lu-Anne McFarlane
Department of Speech Pathology and Audiology
University of Alberta
400 Garneau Professional Centre
11044-82 Avenue
Edmonton, AB. Canada T6G 0T2
(403) 492-5314

APPENDIX M

Instructions To Supervisor - Control Group

This package contains:

- 1 envelope to be given to your student clinician
- 1 Individual Supervisory Conference Rating Scale (ISCRS)
- 1 envelope in which to place the completed ISCRS
- 1 self-addressed stamped envelope in which to return all materials to examiner.

1. Select a tentative date to audio-tape a supervisory conference in conjunction with your student clinician. This date should be as close as possible to mid-term in the placement. Mark this date on your calendar.
2. Allow your student to audio-tape the supervisory conference using the audio-tape included in the student package.
3. Complete the enclosed ISCRS immediately after the audio-taped supervisory conference. You and your student must complete the scale independently. Put the completed ISCRS in the envelope provided. Collect the audio-tape and student ISCRS and return all to the investigator in the self-addressed, stamped envelope provided.

THANK-YOU!!!

APPENDIX N
Instructions To Supervisor - Experimental Group

This package contains:

- 1 envelope to be given to your student clinician
- 1 Individual Supervisory Conference Rating Scale (ISCRS)
- 1 envelope in which to place the completed ISCRS
- 1 self-addressed stamped envelope in which to return all materials to examiner.

1. Select two days in which your student clinician will use the Conference Outline (enclosed in the student envelope). These dates should be within two weeks of each other and as close as possible to mid-term of the placement. Mark these tentative dates in your calendar.
2. On the first date, allow your student about 15 minutes between the end of her treatment session and the beginning of the conference to review and prepare the Conference Outline. **Ensure that your student retains possession of the outline throughout the conference.**
3. On the second date allow your student to use the Conference Outline as before. On this date **audio-tape the supervisory conference** using the audio-tape included in the student package. Remember to **ensure that your student retains possession of the outline throughout the conference.**
4. Complete the enclosed ISCRS immediately after the audio-taped supervisory conference. You and your student must complete the scale independently. Put the completed ISCRS in the envelope provided. Collect the audio-tape, student ISCRS, and completed Conference Outline and return all to the investigator in the self-addressed, stamped envelope provided.

THANK-YOU!!!!

APPENDIX O

Instructions To Student Clinician - Control Group

This package contains:

1 audio-tape

1 Individual Supervisory Conference Rating Scale (ISCRS)

1 envelope in which to place the completed ISCRS

1. Select a tentative date to audio-tape a supervisory conference in conjunction with your supervisor. This date should be as close as possible to mid-term in the placement. Mark this date on your calendar.
2. Audio-tape the supervisory conference using the audio-tape included.
3. Complete the enclosed ISCRS immediately after the audio-taped supervisory conference. You and your supervisor must complete the scale independently. Put the completed ISCRS in the envelope provided. Give the audio-tape and the completed ISCRS in its envelope to your supervisor to return to the investigators.

THANK-YOU!!!

APPENDIX P
Instructions To Student Clinician - Experimental Group

This package contains:

- 1 audio-tape
 - 1 Individual Supervisory Conference Rating Scale (ISCRS)
 - 1 envelope in which to place the completed ISCRS
 - 2 Conference Outlines
 - 1 Conference Outline-example of use
1. Select two days in which to use the Conference Outline. These dates should be within two weeks of each other and be as close as possible to mid-term of the placement. Mark these tentative dates in your calendar.
 2. On the first date, prepare the Conference Outline after your treatment session and before meeting with your supervisor using the example as a guide.
 3. Meet with your supervisor, **retaining possession of the outline throughout the conference**, using it to guide discussion with your supervisor.
 4. On the second date prepare the Conference Outline as before. On this date **audio-tape the supervisory conference** using the audio-tape included in the your package. **Remember to retain possession of the outline throughout the conference.**
 5. Complete the enclosed ISCRS immediately after the audio-taped supervisory conference. You and your supervisor must complete the scale independently. Put the completed ISCRS in the envelope provided. Give the audio-tape, the completed Conference Outline and the completed ISCRS in its envelope to your supervisor to return to the investigators.

THANK-YOU!!!